My Fellow Mainers,

I am pleased to present to the people of Maine the newest State Health Plan. This Plan reasserts our commitment to an ambitious goal – making Maine the healthiest state in the nation – and lays out a roadmap for reaching that destination. This is a long journey, but one we've embarked upon for the benefit of our families, our communities and our future.

I would like to acknowledge the support of those who helped with the important task of developing this Plan. The Advisory Council on Health Systems Development comprises members from across the state who have selflessly contributed their time and energy to the task of advising the Governor on the goals for the Plan and on its substantive content.

The Maine Health Access Foundation has been very generous with its funding of activities related to the development of this Plan, from its underwriting of *Tough Choices* and the statewide Listening Tour. Foundation staff have also been very generous with their time, support and advice.

I also want to recognize the support provided by the federal Health Resources and Services Administration through its State Planning Grants initiative, The Robert Wood Johnson Foundation, Jane's Trust, the Maine Community Foundation, the Wishcamper Group and the Betterment Fund, all of which provided funding for the public outreach activities related to the development of the Plan.

The staff of the National Academy for State Health Policy, the Margaret Chase Smith School of the University of Maine, and the Muskie School of Public Service of the University of Southern Maine have also been of invaluable assistance.

The greatest thanks go to the hundreds of Maine residents in big towns and small, who came to focus groups, public forums and hearings, and who took the time to write to us with their thoughts about how we can work to make Maine the healthiest state. As is characteristic of Mainers, we heard an incredible diversity of opinion in those voices. But, most impressively, we found a singular concern for community and each other. That is truly an invaluable resource upon which we can build the future.

I look forward to traveling this road together with all of you.

The Honorable John E. Baldacci
Governor

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GUIDEPOSTS

Public Engagement & Development of the State Health Plan

If the State Health Plan is to be a roadmap to improve the health of Maine, we need to set our course with a clear destination in mind and we won't succeed if some of us want to go to Dixmont while the rest of us prefer to go to Gorham. In order for the plan to be of Maine, for Maine and by Maine, we worked to engage the public in a discussion about priorities for the health and health care system of Maine -- where do we want to go together?

The Legislature's Joint Committee on Health and Human Services facilitated that work by amending the Dirigo Health Reform Act to allow us additional time to complete the State Health Plan and gain additional input. The state health planning process is also guided by the Advisory Council on Health Systems Development (ACHSD), an 11-person citizen board appointed by the Governor with review by the Legislature's Health and Human Services Committee, charged with advising the Governor's Office of Health Policy and Finance on the State Health Plan and conducting public hearings regarding it.

To assure that a broadly representative sample of Maine citizens had input into the State Health Plan, we conducted a number of different activities. First, with generous support from private funders, we were able to conduct a unique community forum -- "Tough Choices in Health Care". Working with the University of Southern Maine's Muskie School of Public Service we developed a methodology to randomly select Maine citizens and invite them to participate in a daylong discussion of health priorities facilitated by the independent, nationally recognized organization, AmericaSpeaks. Outreach was facilitated by the University of Maine's Margaret Chase Smith School and Cooperative Extension to assure maximum independence and statewide reach. Twenty stakeholders in Maine assisted Governor's Office of Health Policy and Finance (GOHPF) in developing a primer for the Tough Choices campaign (available on our website www.dirigohealth.maine.gov. The primer provided basic information about Maine and Maine's health care system and walked participants through an exercise to balance often competing interests in cost, quality and access to health care.

A significant number of participants in "Tough Choices" felt that the exercise was too limited. Those individuals volunteered to participate in follow-up focus groups on August 18, 2005 in

Portland and in Bangor.

Over the summer and early fall GOHPF and consultant, staff of the Muskie School at the University of Southern Maine conducted a series of informal stakeholder interviews to gain a better sense of concerns and priorities of key players in Maine. Discussions were held with: the Maine Hospital Association, the Maine Medical Association, the Maine Osteopathic Association, Maine State Nurses Association, Chamber of Commerce Board of Directors, Maine Healthcare Purchasing Collaborative Executive Committee, Community Health Coalitions, DHHS officials, the Bureau of Insurance, the Maine Quality Forum Advisory Committee, Dr. Erik Steele, Co-Chair of the Governor's Council on Physical Fitness, Sports, Health and Wellness, the Center for Public Health, the Maine Association of Health Plans, an employer focus group convened by the Androscoggin County Chamber of Commerce, the Office of the Long Term Care Ombudsman, the Brain Injury Association, the Eastern Area Agency on Aging, Disability Rights Center, the Advocacy Initiative Network of Maine and the Maine Association of Mental Health Services. A panel discussion at the Mane Public Health Association Annual Meeting provided additional input as did written documents submitted by citizens, Maine Health and Consumers for Affordable Health Care.

Making decisions about the top priorities for the State Health Plan required not just the input of engaged stakeholders and the general public but an analysis of the data as we know it. Using existing, credible data available for Maine, GOHPF issued "The State of Maine's Health: A Regional Comparison". That document divided the state into three sections to look at the Maine's diversity as well as commonalities. Specifically, the population of the state was evenly divided into three regions. Data was then synthesized comparing the three population regions of the state. The data book was released in early fall, 2005 and was the foundation for a series of meetings with the public held during a "Listening Tour" in September, 2005. Over 260 Maine citizens participated in meetings in seven sites (Presque Isle, Brewer, Calais, Lewiston, Augusta, Saco and Portland). In addition, a mini-survey was shared with participants at the "Listening Tour" to assure those who felt uncomfortable speaking publicly could have a vehicle for input and to allow additional comments for those who spoke as well.

The Listening Tour and mini-survey identified several themes.

The strongest theme, echoed at every site, was the importance of prevention and the need to improve education and wellness initiatives. Considerable discussion centered on the importance

of supporting local, community efforts to improve health, and the strengthening of preventive activities. A similarly strong theme was the importance of universal coverage, though opinions of how best to achieve it varied with some strongly supporting DirigoChoice, others seeking single payer and still others favoring market based solutions. Others spoke of the importance of trained and available health professionals and clinics and the need to make health care more affordable.

When discussing priorities for public health and prevention activity, participants focused on obesity/nutrition/exercise, followed closely by concern about substance abuse, tobacco use and mental health.

Participants were explicit in defining health broadly -- articulating the importance of the economy on health noting that, as socio-economic status improves, so does health. They also stressed the critical importance of environmental health.

The public engagement process netted considerable input that reflected wide diversity of opinion but also identified the common themes that frame this State Health Plan.

The public engagement process will continue following the release of this final State Health Plan. The Advisory Council on Health System Development reviewed the public input provided in response to the publication of the draft Plan, convened two days of public hearings on the draft and provided extensive advice to the Governor's staff regarding how the Plan might be modified in response to those comments. In addition, the Legislature's Joint Standing Committee on Health and Human Services held a hearing on the draft Plan on November 30, 2005, and offered the Governor's staff their comments and advice on how the Plan might be improved.

All comments received and the guidance provided by the Advisory Council on Health Systems Development informed the development of the final State Health Plan. The Council will continue to provide guidance as the process of moving Maine toward the goal of becoming the healthiest state progresses, and will regularly report back to the Legislature to assure that policymakers may remain informed and involved.

Guiding Principles

On any journey, there are choices about which road to take, where to get on and off the highway, whether to take a direct or

scenic route. Every route has something to offer, and none should be rejected out of hand. The journey to making Maine the healthiest state will be full of such choices, so it is good to have some guideposts to help us keep to the right path. These guideposts – or guiding principles – should be checked often and certainly whenever a fork in the road appears, to make certain we are not going astray.

The following guideposts will lead us:

Accessibility

- Every person in Maine should have access to comprehensive, affordable health care coverage. This includes access to accurate, unbiased information that will allow each individual to make the best possible choices in taking steps toward better health;
- Needed health services should be reasonably located and available to all residents in a timely manner;
- Health begins in the community and is more than treatment – health begins in our homes and with prevention;
- Every Mainer should have the same opportunity to realize his or her potential. We must work to reduce disparities in health status that are associated with gender, education, age, culture, physical or mental ability, sexual orientation and income.

Affordability

- The cost of care must lay within the reach of the resources we have to pay for it;
- In order to effectively manage costs, we have to understand what we are purchasing. The cost of care, coverage and its administration must be transparent to the public. Outcomes of care must be measurable, measured and publicly reported. Similarly, community and government services must be publicly accountable;
- Our investment in health must be sustainable over the long run. This means we must strive for the most efficient use of resources possible and to promote affordability over the long run.

Quality

- In Maine, the right care will be delivered at the right time and

in the right place;
- Health care in Maine will be based on sound research and designed to maximize patient outcomes and patient safety;
- We will measure the quality of care provided in Maine and will continuously work to improve that care.

Each of the sections of this Plan will include a discussion about how the policy and/or projects reflected in that section relate to these guideposts.

Some of the Signs Along the Way

Along every highway there are signs letting you know where you are and the direction you're headed. While each leg of our journey has its own markers of progress, we can also mark our journey by taking a look down at the map from the tree top level – sometimes it's easier to see from up there.

Maine will mark its progress toward the goal of becoming the healthiest state against national benchmarks.

Long range goals

Achieving "best in the nation" status relative to our most pressing health problems – the chronic conditions of cancer, cardiovascular disease, chronic lung disease, diabetes and depression – will be key to our making Maine the healthiest state.

Achieving these objectives will take time – much longer than the two year period covered by this Plan. But that's to be expected. Becoming the healthiest state is a big goal and realizing big goals take time. But it's a worthy and achievable goal and one that is worth driving toward.

As a point of reference, here are the relevant benchmarks for cancer, heart disease, stroke, diabetes and mental health, from the most recent data available. Maine is compared to the US and to the state now exhibiting the lowest rate for each particular measure.[1]

	Cancer Deaths/100,000 (2002)		Heart Disease Deaths/100,000 (2002)		Stroke Deaths/100,000 (2002)	
Maine		214.2		209.0		53.9
Benchmark State	UT	144.2	MN	163.9	NY	37.4
US		193.5		240.8		56.2

	Diabetes Rate/100 Adults (2002)		Diabetes Deaths/100,000 (2002)		Percent of Adults with Poor Mental Health (2004)	
Maine		6.6		27.0		33.8%
Benchmark State	MN	4.6	HI	15.2	LA	24.5%
US		6.7		25.4		33.9%

Short range goals

This journey is going to be a long one and while becoming the healthiest state is our ultimate goal, the initiatives laid out in this Plan are intermediate steps toward that goal. This written Plan is meant to document the route we are taking to reach our destination – it is not an end, in and of itself. It is intended to be a living document, one that changes over time to reflect shifts in the needs of our population and the evolution of health care.

The written Plan will be updated every other year, but the strategies laid out here will be implemented over the course of the next two years. Although we have long range markers for success, we also need to set some intermediate or short-term goals, against which we can evaluate the effectiveness of this Plan. This will help us develop better Plans in the future.

Many people in Maine have worked very hard to develop action agendas, work plans and goals on a number of important health-related issues. These include, but are not limited to, *Maine's Comprehensive Cancer Control Plan, Maine's Cardiovascular Health Plan, the Maine Diabetes Control Program,* and *Maine's Asthma Plan* each address an aspect of the "3 C's and a D" – Maine's major chronic illnesses. *Healthy Maine 2010* outlines needs, goals and strategies for comprehensive prevention efforts to address our state's most pressing health needs. The State has an injury prevention plan, and a nutrition and physical activity plan.

For the most part, these plans address a specific aspect or problem set related to Maine's health needs. The purpose of this State Health Plan is not to supplant the hard work or the strategies mapped out in the other plans. Instead, this Plan is intended to serve as a single point of consolidation, laying out in a comprehensive manner how we will move toward a shared vision of making ours the healthiest state in the nation.

A number of short range benchmarks will be used to assess our progress over the next two years are shown below. Importantly, progress toward most of these measures can be tracked through existing data collection mechanisms. The timing of data collection, though, may be frustrating to some who would like frequent updates on our progress. The Behavioral Risk Factor Surveillance Survey (BRFSS), for example, is administered by the federal government and is conducted in accordance with a pre-determined schedule over which Maine has no control. We will have yearly updates on these data, but they will come months after the close of a year. This means that while we will be able to tell how we did in 2006 at some point in 2007, we won't have 2007 until 2008. So we will have to watch for trends tracking in the "right" direction.

Second, it is important to be clear that changing the rate of death for certain conditions is a very hard task. It takes time and it takes determination. The progress markers included here that relate to changed in mortality rates may look small, but they will be difficult to realize. That's no reason, though, not to work to achieve them.

- *The percentage of Mainers who engage in leisure time physical activity will increase to 85% by the end of the two-year period covered by this Plan.* Over the course of the two years, there will be movement toward this objective.

  - This objective relates to this Plan's call for creating a culture of health in Maine, which aims to engage all Mainers in active support of their own health and well-being. Exercise is one of the ways that we can actively work to improve our own health. It is important as a primary preventive measure, to prevent the development of disease conditions, and as a secondary measure to help mitigate the progression of diagnosed disease.

  - The 2004 Behavioral Risk Factor Surveillance Survey, conducted by the CDC, found that 78.4% of Mainers engage in this type of physical activity. For reference purposes, this compares favorably to a nationwide value of 77.1%; Minnesotans demonstrate the highest proportion of residents engaging in leisure time physical activity – 84.1%. It is this benchmark that we are striving to beat. Maine's experience in this area has been trending in the right direction over the past decade, increasing from 66% in 1996.[2]

- *The percentage of Maine women age 40 and older having had a*

mammogram within a two-year period will increase to 85% by the end of the two years covered by this Plan. Over the course of the two years, there will be movement toward this objective.

- This objective relates to this Plan's call for creating a culture of health. and is intended to spur Mainers to actively participate in their own health care and in efforts to improve their health status. Screenings such as mammograms are important primary preventive measures that facilitate the early detection of breast cancer – one of the most prevalent cancers in Maine. The periodicity – of schedule of screening – for mammograms is evidence-based and has shown to be an effective tool for early detection of breast cancer – and early detection saves lives. Mammograms are covered by the MaineCare program and commercial insurers are required to provide coverage for these tests. Uninsured women in this age group can access mammogram services through the Maine Breast and Cervical Cancer Program, which will pay for the screening when it is performed by a participating health care provider.

- The 2004 Behavioral Risk Factor Surveillance Survey shows that Maine already performs well against this measure, with 81.8% of women over 40 reporting having had a mammogram within the previous two-year time period. As a point of comparison, the national percentage for this measure is 74.6%, and Maine's current experience is slightly lower than that of Delaware, Massachusetts and Rhode Island, where the screening rate for this age category is 82.4%. Maine is moving in the right direction, with the proportion of women screened increasing from 17% in 1996,[3] but we need to continue to improve.

- Note: the Behavioral Risk Factor Surveillance Survey does track data over time regarding screening for prostate cancer using the PSA (or "prostate specific antigen") blood test. However, the US Preventive Services Task Force has concluded that the evidence is insufficient for recommending for or against routine screening for prostate cancer using the PSA test.[4] Therefore, the Plan does not embrace that measure as a benchmark.

- *The percentage of Maine adolescents who are at an appropriate weight will reach 92.5% over the two-year period covered by the Plan, moving toward the Healthy Maine 2010 target of 95%.*

  - This primary prevention objective relates to the Plan's call

for encouraging all Mainers – regardless of their age – to take an active role in nurturing and improving their health status. We know that Maine is challenged by a weight problem. While this Plan does not include a specific initiative related to obesity, working toward healthy weights is certainly a priority of the Maine Center for Disease Control and Prevention as well as the many voluntary public health efforts around the state. The monies from the Fund for Healthy Maine are used, in part, to support initiatives aimed at promoting healthy weight.

- Data from the Maine Youth Risk Behavior Survey for 2001 show that 10.3% of Maine youth are overweight or obese; we do not have data from other states to compare ourselves against. The target set here is the half-way point to the *Healthy Maine* goal to reduce the percentage of children who are overweight or obese to 5%.

- *The percentage of Maine children who smoke cigarettes will decline to 14% by the end of the two-year period covered by the Plan.*

  - This objective also relates to the Plan's call for each one of us to take an active role in promoting health and may be one of the most significant preventive efforts that can be made to improving the overall health status of Mainers over the long term, and to stem the tide of challenge chronic illness presents to us. Maine recently earned the highest marks in the nation for efforts to reduce the impact of tobacco (by promoting smoke free air, spending our tobacco settlement funds on prevention activities, having a cigarette tax in excess of $2 and implementing restrictions on youth access to tobacco). Maine has a robust and comprehensive program of tobacco control that provides education and cessation assistance, regardless of ability to pay.

  - The *Healthy Maine 2010* objective for adolescent cigarette use is 15%. In 1999, the value for this measure was 28.6% and in 2001, that measure had dropped to 24.8%.[5] The American Lung Association of Maine reports that youth smoking is now at a level of 16.2% - remarkable progress. Still, at the current pace, more than 2,000 Maine kids become regular smokers each year, too many of whom will die prematurely from their addiction.[6] We need to "beat" our own record for improvement, and continue to work to save the lives and breath of our next generation.

Of course, these measures represent only a subset of those that might be highlighted in tracking progress toward becoming more engaged in our own health. Many of the *Healthy Maine 2010* objectives relate to this aspect of the Plan. All of those objectives will be tracked over time and all should demonstrate improvement over the two-year Plan period. You can read about these measures in *Healthy Maine 2010,* which is available on-line at: www.maine.gov/dhhs/boh/healthyme2k/hm2010a.htm.

- *The proportion of Maine adults with diabetes who have taken a course on self-management of their condition will increase to 75% over the two-year period covered by this plan.*
  - This objective may be realized if we are able to improve the care of Maine's chronically ill residents. While the Plan does not focus specifically on diabetes, diabetes is one of the leading chronic conditions in our state. Successful efforts to meet the needs of chronically ill patients will undoubtedly impact people with diabetes. In addition, the State as well as many health centers and other providers are actively addressing the issue of diabetes right now. This focused energy will allow us to make strides toward our objective.
  - In 2001, only 62.3% of adults with diabetes living in Maine had taken a course on managing their diabetes. The *Healthy Maine 2010* goal for this measure is 80%. Data comparing Maine to other states is not the issue here; eventually we should expect that *all* people living with diabetes will be appropriately prepared to take an active role in the management of their condition.

- *The rate of death attributable to diabetes will fall to over the course of the two-year period covered by this Plan.*
  - This objective relates to the Plan's call to improve care for Maine's chronically ill. To the extent that we are able to realize improvements in the systems of care for these patients, outcomes – including mortality – for patients with diabetes will be improved.

    Reducing mortality rates – for diabetes or any other chronic illness – is a very difficult task. Because chronic illnesses are, by definition, long lasting they are often considered an underlying cause of death. Underlying causes of death are reported on death certificates and form the base of data

that are used to calculate mortality rates. Still, it is possible to die with a disease and not from a disease, and that is what we are striving for.

- Diabetes deaths in Maine increased from 72.9 per 100,000 residents in 1990 to 81.7 per 100,000 in 2000. The *Healthy Maine 2010* target for diabetes mortality is 65 per 100,000.[7]

- It is important to note that these death rates differ from those shown earlier on page 9. The data shown in the paragraph above comes from the Maine Center for Disease Control and Prevention and is used to show Maine trends, over time. The population data used to calculate these rates is somewhat different from that used to calculate the rates appearing earlier in the Plan, as are the disease codes. The range of codes used for the Maine-only trend data is narrower than that used for the earlier rates.

  Comparability of data will continue to be a problem for us as we measure Maine's performance against that of the nation. Coding practices, and diagnostic codes themselves, change over time. We need to work to ensure that measures are as comparable as possible.

- *The rate of hospitalization for asthma will decline to 7.5/10,000 residents over the course of the two-year period covered by this Plan.*

  - Again, this objective will reflect improvements in our ability to effectively care for chronically ill patients. Maine has a high rate of asthma. To the extent this condition is managed effectively, the rate at which patients with asthma will become sick enough from their condition to require hospitalization will fall.

  - The rate of hospitalization for asthma in 1998 was 9.5 per 10,000 residents; in 2000 this had fallen back to 9.5 per 10,000 after a small spike upward in 1999. We have set a *Healthy Maine 2010* goal for this measure of 6.5 per 10,000 residents and need to make better progress toward realizing that goal.

- *Maine's rate of death from chronic lung disease will decline to 151 per 100,000 residents over the two-year period covered by the Plan.*

- Chronic lung disease is one of the top chronic illness challenges facing our state. Our rate of death from this condition exceeds that of the US. If we are able to improve systems of care for patients with chronic illness, we will be able to better impact the progression of this illness, which will be manifested in a decline in the rate of death attributable to the disease.

- In 1998, the rate of death from chronic lung disease was 159 per 100,000 residents of Maine. The *Healthy Maine 2010* goal for this measure is 150 deaths per 100,000 residents. Unfortunately, the trend for this measure has been moving in the wrong direction over the past 15 years, increasing from a low of 108.7 per 100,000 in 1990. This trend appears to have begun to moderate in 1999, and we will have to work hard to keep things on track.

▪ *The rate of death from stroke will decline to 52 per 100,000 residents over the course of the two-year period covered by the Plan.*

- Cardiovascular disease – which includes stroke – is among the top chronic illness concerns in Maine. To the extent we are able to improve chronic illness care – and work as individuals on our own health status – we can influence the impact of this disease as measured by its mortality rate.

- Stroke death in Maine has been relatively stubborn since 1990 when it was 59.6 deaths per 100,000 residents. In 2000 the rate was 56.3 deaths per 100,000[8] and in 2002 the rate was 53.9. This compares to a US rate in 2002 of 56.2 deaths per 100,000 people; latest data (2002) show New York as currently having the lowest rate of death due to stroke at 37.4 per 100,000. We've set our *Healthy Maine 2010* goal at 51 deaths per 100,000.

▪ *Death from coronary heart disease will decline over the course of the two-year period covered by the Plan.*

Coronary heart disease (CHD) falls under the general chronic illness category of cardiovascular disease. By doing a better job of taking care of ourselves and by improving the quality of chronic illness care in our state, we can mitigate the impact this disease has on our residents. Like diabetes, though, because CHD is, by definition, long lasting it is often considered an underlying cause of death. Underlying causes of death are reported on death

certificates and form the base of data that are used to calculate mortality rates. Still, it is possible to die with a disease and not from a disease, and that is what we are striving for.

- Similarly, the examples used for heart disease mortality in the earlier discussion regarding long term goals does not mesh perfectly with these Maine-only trend data. Just as is the case with diabetes, codes have changed over time, which impacts the number of deaths counted in each of the rates. Moreover, the range of codes used in each of the markers differs, further challenging comparability.

- Maine has been making progress in its efforts to reduce the rate of death from CHD. In 1990, our annual rate was 242.4 deaths per 100,000; it had fallen to 168.2 by the year 2000. Our *Healthy Maine 2010* goal for this measure is 166 per 100,000 residents[9] – so we still have a ways to go.

- *Maine's death rate from cancer will fall over the course of the two years covered by this Plan.*

  - Cancer is another of the most pressing chronic illness problems facing our state. To the extent that we are vigilant as individuals and work to reduce our risk of cancer or – if we are cancer patients, work to avert progression of the disease – and to the extent that we are able to improve systems of care for chronically ill patients, we will be able to realize outcomes improvements for this condition.

  - In 1990, the overall mortality rate for all cancers in Maine was 232.3 per 100,000 residents. This rate has fallen slowly over the years, reaching 223.1 per 100,000 residents in 1999. *Healthy Maine 2010* targets this marker for a slight decrease. [10]

  - The same issues of comparability of data related to diabetes and heart disease also apply to cancer mortality rates.

- *The proportion of patients seen in a primary care setting who are screened for mental health status will begin to be measurable over the course of the next two years.*

  - This objective relates to the Plan's call for improving the care of all Mainers by recognizing that mental health is a vital aspect of overall health status and for the effective

integration of mental health into primary care.

  - As discussed later in the Plan, we are just embarking on this initiative. One of the challenges we face is a lack of data regarding the extent to which such integration is present – or lacking – in our primary care practices. This objective differs from the others in that we haven't set a target for change in a rate – that's because we need to take care of the basics first. Before we can set goals and measure change, we need to begin to establish strategies for collecting these data and measuring where we stand.

- *The number of previously uninsured people enrolled in DirigoChoice will double over the course of the two year period covered by the Plan.*

  - As described elsewhere in the Plan, access to affordable health coverage is key to getting people the care they need at the right time and in the right place.

- *The care of heart attack patients in Maine will improve over the course of the next two years, by developing standard processes of care, statewide, ensuring that the right type of clinical intervention is delivered at the right time to as many patients as possible.*

  - This objective relates to a major quality improvement initiative described in the Quality portion of the Plan. Setting this work in progress should result in better outcomes for heart attack patients in Maine.

Finally, as you read through the Plan, a number of process-oriented objectives are set out. For example, in the quality section of the Plan, a workplan is established for the development of a statewide guideline for the care of heart attack patients. Similarly, there are objectives included relating to the conduct of certain studies or pilot projects. While these activities will not directly result in an impact on death rates or disease incidence they remain important steps in our effort to make Maine the healthiest state. By marking progress on these activities we are also measuring our progress toward our ultimate goal.

ASSESSING THE LANDSCAPE

There are many factors that impact our health – age, gender, race, culture, genetics, income, education, geography and just plain luck all play a role. In Maine, we face a number of challenges that make realizing our goal of becoming the healthiest state more difficult. Several of these challenging factors are described below.

Geography

Maine is a very large state – with more than 33 thousand square miles, it is almost the size of New Hampshire, Vermont, Rhode Island, Massachusetts and Connecticut combined. At the same time, we have a population of just fewer than 1.3 million people – only a tiny fraction of the northeast's entire population – spread over this vast geographic area.

Figure 1: Size of State and Population Density, 2000 [11]

	Land Area (square miles)	People per Square Mile
US	3,537,438	79.6
Maine	**30,862**	**41.3**
VT	9,250	65.8
NH	8,968	137.8
MA	7,840	809.8
CT	4,845	702.9
RI	1,045	1,003.2

Maine is the largest state in the northeast and has, by far, the lowest population density. Even when compared to the United States as a whole, with its vast rural areas, Maine's population density is only slightly more than 50% of average US population density.

This fact is one reason why we have ended up with a high number of hospitals – and hospital beds – relative to the number of people living in our state than do other New England states.[12] These facilities were developed in an effort to bring critical health care services closer to home.

Maine has 39 hospitals. Even with this number of facilities, some residents of Maine have to travel rather long distances (especially in the wintertime) to reach the hospital.

It is not unusual to see other types of health care services clustered near a hospital. The hospital serves as the "hub" of our health care delivery system and other types of health care providers find it sensible and convenient for themselves and their patients to be located close to a hospital. On the one hand, this means that your trip into a "large" town to see a specialist physician may be able to be combined with a trip to the lab to get your blood drawn or to the radiology department to get an X-ray taken or to the pharmacy to pick up a prescription. It also results in an unequal distribution of health care resources around the state, which can pose challenges to ensuring that Mainers have appropriate access to needed services, without regard to where they might live.

Age

The average age of Mainers is older than the rest of the country. Our median age is 38.6 years, compared to the median age for all Americans of 35.2 years. More Mainers than typical Americans are 65 years of age or older (14.4% v. 12.4%). In just five short years, Maine is expected to have the 3rd largest share of residents who fall into this age group; we are expected to take over 2nd place in the year 2030. By then, it is projected that only 18.1% of Maine residents will be under the age of eighteen [13] as compared to the current proportion of 23.6%.[14]

It would seem logical to conclude that the fact that Maine is "older" than other states is at least partly responsible for the fact that we spend much more on health care than other states do. However, this conclusion is not supported by research, which finds that only 6-7% of total growth in health care spending is attributable to the influence of aging.[15] This is because the proportion of the population that is elderly is growing relatively slowly and, further, that spending on this sector of the population is increasing more slowly than is spending on younger people.

Although the research also shows that our longer life spans now reflect fewer years of disability (that is, we are living longer, generally healthier lives), the heavy burden of chronic illness in this state introduces some uncertainty into the equation for Maine. In addition, there are challenges related to how we might best care for our elders given the realities of our geography. People may live in relatively isolated areas and have transportation issues; this complicates the task of ensuring they are getting the right care at the right time.

Health Behaviors

The choices we make day to day about how we behave – whether we smoke, wear our seatbelts or helmets, whether we exercise, eat healthy, nutritious foods or use preventive medical care – do have an impact on our well being.

Mainers don't always adopt the healthiest of lifestyles. For instance, more of us tend to be overweight than do Americans, in general, and we have high rates of smoking among adults. While there are many factors that influence lifestyle choices, it is important that each of us take responsibility for our own actions and work to be as healthy as we can. By actively promoting our own health, we can reduce our risk of sickness and death. At the same time, by working at being healthy, we help ourselves be as productive as possible.

It is also important that we all understand that it is not helpful to blame people for their health status. There are lots of reasons people get sick or develop a disability – not all related to their behaviors. For those who engage in the risky behaviors, there may be lots of reasons why they might find it difficult to alter those behaviors. Instead of finger pointing or punishing, we have to find ways of supporting and enabling better health behavior.

Socioeconomic Status

Taking all other demographic factors into account, income has, by far, the greatest impact on mortality. The influence on mortality of risky behaviors like smoking, drinking, lack of exercise or obesity pale in comparison to the influence of income.[16] There are stubborn gaps in health status between low income and higher income people – "inequality is a health hazard." [17]

This is not to say that working to minimize risky health behavior is not worth doing. Nor does it imply that access to care is not important. But it does imply that in order to improve the disparities in health status, we have to pay attention to the issue of income.

Mainers have lower median household incomes than do Americans, generally [18] and, within Maine, there is variation in income. US census data show there are far fewer people living in poverty in the southern region of the state than there are in either the central or northeastern regions. This variation likely contributes to differences in health status and need across these regions of the state.

Reaching our goal of becoming the healthiest state, then, parallels

our economic development efforts. As our efforts to improve Maine's economy continue to succeed, our health will likely improve as well. We are on the right track – real (meaning the gain after taking inflation into account) per capita income in Maine increased 2.6% between 2003 and 2004. [19]

Health Status

Mainers bear a heavier burden of chronic illness than do most other Americans. This is partly because our population is somewhat older than the country as a whole, but it is also likely related to the fact that we are less likely to have a college education than Americans generally and tend to have lower incomes – and both of these factors *do* affect health. We also lowest proportion of employer-sponsored insurance coverage in New England. And we have high rates of behaviors that influence disease, such as use of alcohol, tobacco, and sedentary lifestyles.

In addition to differences between Maine and the rest of the country, there are also differences *within* Maine itself. Part of the early work we have to do to make Maine the healthiest state is to recognize that differences exist across our state. The roads we travel down on our way to our goal may need more work in certain regions of the state than in others.[20] The community that is Maine needs to reach across town lines, across demographic lines, across economic lines and see to it that every person – east, west, north and south – has access to an entry ramp onto this highway we are traveling down. This will be a hard trip and it may be a long one, but one well worth taking together.

It is also important to recognize the challenges faced by people living with disabilities. Some disabilities can render a person at greater risk for other health problems. Others can make it difficult for a person to access needed services; physical accessibility to providers sites remains problematic and not all provider are equipped or comfortable providing care to disabled persons.

Race and culture are similarly factors that impact appropriate access to needed services. Our health care system often has difficulty accommodating people who speak another language or who values and customs are outside of our mainstream experience. Maine is becoming more racially, ethnically and culturally diverse, and our health care needs and challenges are evolving as the character of our population evolves.

Our Healthcare Marketplace

There are many players in our health care system. First are purchasers, who buy care either through an arrangement with an insurance company or directly. Purchasers include employers who sponsor health insurance benefits for workers, individuals who pay all or a portion of their health care premium or the cost of services directly out of their own pockets, and governments – both state and federal – which sponsor public programs like Medicare and Medicaid. Purchasers help fuel the system by supplying funding.

Insurers receive funds from purchasers and use them to reimburse health care providers for services delivered. Providers are health care professionals and organizations – including doctors, nurses, hospitals, pharmacies, etc. – who actually provide care. Suppliers, the fourth class of player, produce many of the "non-professional" inputs needed to supply care, including technological equipment, pharmaceuticals, bandages, lasers, and so on. [21] Each of these players can and do impact the performance of the system in one way or another, their interactions forming a complex web where it is difficult to disentangle the impact of one player from that of another.

Many people advocate for more competition in health care as an answer to spiraling costs and sub-optimal outcomes of care. People who argue this position view health care as a traditional marketplace, susceptible to the traditional market pressures of supply and demand. The move toward health savings accounts and high deductible insurance plans is a market-based strategy in health care.

In order for a free market to work, though, patients would have to be responsible for a good portion of the cost of the care they were seeking to purchase *and* they would have to have information sufficient for them to make judgments regarding differences in the cost of care across providers. Providers, for their part, would have to compete for patients on the basis of price and quality. Today, these market conditions don't exist.

Our market needs help to operate efficiently and effectively. Consumers need reliable ways to compare widely differing prices across providers. Although it is somewhat helpful to know standard or average prices, you just don't know when you go to the doctor with a cough, whether you will end up paying $60 for an office visit and $6 for some over the counter cough medicine. Or, you might end up spending $6,000 for a chest scan and bronchoscopy. There really is no good way of predicting – and therefore, no good way of shopping around, especially for non-discretionary care. Comparing

prices for routine care – like a simple office visit or blood test – is much simpler a task. However, when people need care – especially hospital care – it is often an emergency, when emotions and anxiety are running high – a situation that is not conducive to rational – and traditional – market behavior.

In Maine, our markets for hospital services, insurance coverage and many specialist physician services are highly concentrated. That is, there are just not a lot of "sellers" that consumers can choose from. Maine's 1.3 million people, predominance of very small business and vast geography make the state relatively unattractive for insurance companies; the administrative costs associated with marketing and administering health care coverage in this setting are too high relative to earnings potential. Markets with few sellers and uninformed purchasers are not able to foster price competition, which is essential to a healthy, working free market system.

Having health insurance coverage can insulate consumers from the price of the health care services they seek and receive. This is because someone else – the insurer or Medicare or Medicaid – is paying some, or all, of the bill. Some people argue that if consumers share at least some financial risk for their care, they will be more discerning about how and when they seek care. This leads to recommendations for insurance policies with high deductibles. If you knew you were going to have to pay the first $5,000 of your health care every year, you would probably think twice before you went to the emergency room. The downside of these types of plans is that lower income people, or people who have higher health care needs, can end up putting off needed care until they are seriously and acutely ill, when care will be more costly and likely have poorer outcomes.[22] We need to find a reasonable middle ground here, where consumers are incentivized to use care discriminatingly, but where everyone can appropriately access the care they need when they need it.

Healthcare Costs

When thinking about health care spending, it can be helpful to look at what we are spending our money on and which medical conditions are driving increases in health care spending.

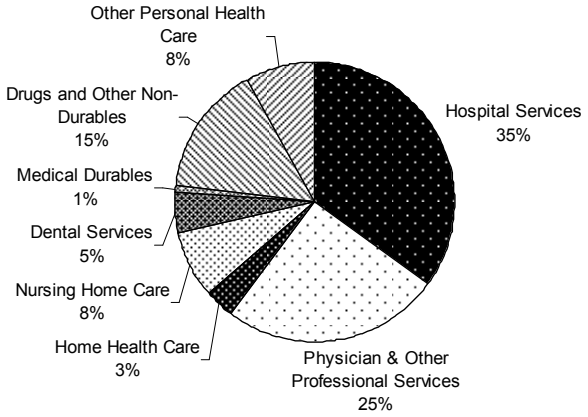
Researchers have shown that 15 of the most common medical conditions accounted for 56% of the increase in health care spending in the United States between 1987 and 2000.[23] This research also provides a method to determine the components of that spending – how much is due to more underlying disease in the population, our growing ability to diagnose and treat disease, the

growing cost of treatment and just growth in the population.

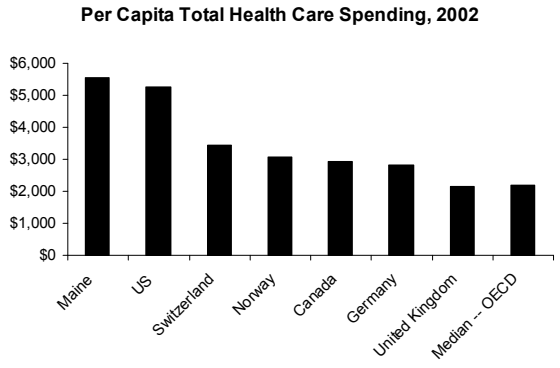
If we apply this same analytic approach to Maine's growth in health care spending from 1998 to 2005, adjusting for the fact that Maine's population has grown more slowly than that of the nation as a whole, it follows that $1.2 billion – almost 37% of the $3.3 billion increase in health care spending over those 7 years – is attributable to the leading chronic illnesses: cardiovascular disease; cancer; chronic lung disease; and diabetes. *All of these conditions are largely preventable.*

How Mainers spend their health care dollars is similar to other Americans; below is a breakdown of Maine health care spending by categories of spending for 2005.[24]

Applying national trends to Maine, it is estimated that, in 2005, there will be a 7.5% increase in our health care spending, bringing our total spending to $8.2 billion. This includes spending by consumers, insurers, business, and government. An overview of projected increases in spending, by category of expenditure, appears in Appendix One of this Plan.



As noted elsewhere in this Plan, Maine's health care spending is higher than the median expenditures for the nation. In turn, the US spends more than other developed countries around the world (see chart, below).[25] At the same time, our overall health attainment ranks only 24th among developed nations. The poor return on investment in that equation raises serious issues.



Unquestionably, Mainers enjoy some of the best health care available anywhere. Our hospitals, doctors and other health care professionals and facilities are world class. There is, though, a great deal of variation in the utilization and outcomes of care across our state. People are hospitalized for the same condition much more often in some Maine communities than in others. So, where you happen to live can have a lot to do with the care you receive and what the outcomes of that care may be.

Cardiology, digestive and respiratory conditions – the categories for the most common chronic disease conditions – account for the vast majority of the admissions to hospitals that show the most variation in rates from one community to the next.[26] The rates at which people are hospitalized with these conditions vary from almost 20% below the state median to 40% above that median. While there is some difference from one town to the next with regard to the prevalence of these disease conditions, those variances are small when compared to the variation in hospitalization rates for the conditions. The variations are not explained, either, by differences in the age, socioeconomic status or other demographic factors in the populations of these towns.

There are many factors at work in generating these differences. The most important thing to note, though, is that these variations represent a significant opportunity to improve the quality and outcomes of our care and, consequently, ensure that the investments we are making in our health care are appropriate. Right now, we are unable to make that claim.

A recently published study by the University of Southern Maine's Muskie School of Public Service examines the experience of a group of more than 100,000 privately insured Mainers over a time period

spanning from 1995-2001.[27] These individuals were members of group health plans sponsored by some of the state's largest employers, all of whom participated in the Maine Health Management Coalition over the course of the study period. The population in this study primarily comprised working people (or dependents of workers); in that sense, the findings associated with this population are not strictly applicable to Mainers as a whole. However, a working population associated with large groups – such as the people employed by business members of the Maine Health Management Coalition – are generally viewed by insurance carriers as lower risks than folks working in smaller businesses or those not attached to the workforce, the theory being – in part – that if you are sick, you won't last long in large business' competitive employment marketplace. To the extent this perspective is accurate, the study population might be expected to be healthier than the general Maine population. This implies that the health care use and cost findings of this study may actually underestimate what goes on statewide.

The study's key findings are as follows:

- From 1995-2001, average age-adjusted per person costs in this insured group of more than 100,000 people rose 34%;
- Inpatient hospital care use changed modestly, but the rise in the average cost per discharge was far above the national average;
- While the increase in the use of physician services by this group exceeded the national average, the use of such services remained below the national benchmark;
- Outpatient costs – both hospital and non-hospital – rose substantially. Hospital outpatient costs were the most significant contributor to the overall increase, rising by more than 90%, and outpacing the national experience;
- Use of services across all health care delivery settings (not just hospitals) grew substantially. Increases in the use of advanced imaging, for instance, was striking. National data indicated that Maine's MRI capacity ranks among the highest in the US – 8 times higher than that of New Hampshire.

The cost of care is rising at a pace that outstrips the improvements in our economy. Continuation of this trend will mean that health care will comprise an ever-growing portion of our spending. If you accept the fact that Mainers do not have unlimited resources, this means we will have an ever-declining pot of money, then, to spend on other things that are important to us.

The fact that the median income in Maine is relatively low means

that our residents likely require more health care services than do residents of wealthier states. Still, if we fail to balance health care spending with our ability to pay, our economy will suffer, which will not help raise the standard of living for all of our citizens. It is in this spirit that the Plan recommends the Certificate of Need investment priorities described later in this document.

Where Are We Now?

Making Maine the healthiest state is an ambitious goal; "getting there" will take time and significant energy across all sectors – communities, insurers, employers, state government, local governments and each and every one of us has a role to play in getting us to our goal. And – first things first – we have to agree on our destination and our route.

Maine does have many of the attributes of a healthy state. For instance, we've made tremendous progress in the area of infant mortality. Two decades ago, Maine had one of the highest rates of infant mortality in the country. By pulling together and with a lot of hard work, Maine, today, is a national leader in reducing infant mortality.

Mainers have also done a great job in reducing the rate of teen smoking and we have improved the smoking quit rates among adults. These achievements are undoubtedly due, in part, to focused efforts on the part of health providers and advocates, State government, the Maine legislature, schools, store owners, law enforcement, employers and communities who have come together to make tobacco cessation a priority in our state.

But we still have a long way to go.

The measures shown in the Figure below are from the Kaiser Family Foundation and the Annie E. Casey Foundation websites and are, for the most part, updated once every one or two years, allowing us to track our progress over time.

Importantly, the data shown for cancer and heart disease are "adjusted for age," which means that it shows differences between Maine and other states *after* taking into consideration that some states have older populations. This means that the differences shown here are *not* driven by the fact that Maine has an older population.

Figure 2: Maine compared to the Nation *[Note: the data shown below relate to a number of different years. Please consult the endnotes for specific references.]*

Measure	Maine	US	Maine Rank
Cancer incidence per 100,000 residents [28]	**515**	461.6	2nd highest
Death from Heart Disease per 100,000 residents [29]	**209**	240.8	24th highest
Prevalence of adult asthma [30]	**9.9%**	7.7%	1st highest
Prevalence of Diagnosed Adult Diabetes [31]	**7.4%**	7.2%	19th highest
Prevalence of Poor Mental Health, Adults [32]	**33.8%**	33.9%	26th highest
Rate of Adult Overweight and Obesity [33]	**55.9%**	56%	25th highest
% of Adults *not* exercising as recommended [34]	**50%**	55%	14th highest
% Young Children w/o rec. immunizations [35]	**22%**	22%	26th highest
Binge Drinking among children ages 12-17 [36]	**11%**	11%	19th lowest
Smoking in past month among children, age 12-17 [37]	**13%**	13%	14th lowest

These data show that, relative to the rest of the country, we have high rates of cancer and asthma – i.e., the fact that we are "first or second highest" means that we have more cancer, asthma and drug addition by young adults than other states – but that for the other measures, we are nearer the middle of the pack.

It is just as important to note that there is variation across Maine with regard to measures like this. People residing in the northeastern, central and southern regions of the state have sometimes very different health status profiles. For more information on this variation, please see *The State of Maine's Health – A Regional Comparison,* published by the Governor's Office of Health Policy and Finance in August 2005. A copy of this report is available on line at: www.dirigohealth.maine.gov.

For all of these measures, there is considerable room for improvement, which will both improve quality of life for countless Mainers and bring significant savings in health care costs.

BUILDING NEEDED INFRASTRUCTURE – PUBLIC HEALTH IN MAINE

Taking the long journey to make Maine the healthiest state requires an organized public health infrastructure that is strategic and reliable across Maine. A well developed and organized infrastructure is intimately related to our ability to achieve our goal of ensuring that all Mainers have access to affordable, quality care that will help individuals maximize their personal health status and productivity.

First, it's important to be clear about what we mean when we use the term "public health." What public health boils down to is the work of ensuring that all communities are healthy places in which to live, work and play. There are ten core functions that make up public health – these are referred to as the "ten essential public health services." They include: [38]

- Monitoring health status to identify problems at the community or population level (as opposed to on a person-by-person level);
- Diagnosis and investigation of health problems and health hazards in the community;
- Informing, educating and empowering people about health issues;
- Mobilizing community partnerships to identify and resolve health problems;
- Developing policies and plans that support individual and community health efforts;
- Enforcing laws and rules that protect health and ensure safety;
- Linking people to needed personal health services and assure the provision of health care when it is otherwise unavailable;
- Assuring there is a competent public health and health care workforce;
- Evaluating the effectiveness, accessibility and quality of person and population-based health services; and
- Researching new insights and innovative solutions to health challenges.

When you consider all of these core functions, it becomes apparent that there are a wide range of volunteers, agencies and organizations in Maine that are involved in public health activities, many of which you might not readily identify as a "health" agency. For instance, the State Department of Environmental Protection – which is charged with safeguarding the quality of our air and water and for protecting us from environmental hazards that might

jeopardize Mainers' health – is a part of the public health team, and the programs and policies that agency oversees are related to public health. Similarly, state programs related to occupational safety, the enforcement of food handling standards in our restaurants or even the enforcement of Maine's seatbelt laws are all part and parcel of public health in this state.

This is not to say that public health is strictly the business of state government. In fact, Maine is somewhat unusual in that much of the work of public health is *not* carried out by State government, but by local, private sector partners. Maine's public health strengths lie in the dedicated people – paid professionals and volunteers – across the state working tirelessly to improve the health of their communities. Some of those who are dedicated to public health work as part of a local organization such as a hospital, school, Healthy Maine Partnership or healthy community coalition, while others work as part of a statewide organization such as the Coalition on Smoking or Health, the American Lung Association of Maine, or the American Cancer Society. Maine's commitment to spend its share of the National Tobacco Settlement (Fund for a Healthy Maine) on tobacco prevention and other public health strategies reflects the strength of Maine's commitment to public health and its dedicated public health community. As a result of these and other prior efforts, Maine has made marked progress in reducing youth smoking, infant mortality, and teen pregnancy.

Despite these commendable achievements, the State can do more to assure a more organized statewide system of public health. Currently, the State distributes public health funding in many streams, according to the specific content area the funds are intended to address. This is often in response to Federal funding requirements. As a result, Maine DHHS distributes over 550 separate grants to sub-state organizations for public health activities. These grants each require administrative and reporting capacity to assure accountability. However, recently the public health community across the state has been working to identify ways to use these funding streams to build a more coordinated system for public health. The Legislature's Joint Committee on Health and Human Services has also expressed its support for strengthening the system of community health coalitions.

To expand Maine's public health infrastructure, we need to build upon the strengths of Maine's public health community, within the limits of available financial resources. To discern the best path forward, the Governor's Office of Health Policy and Finance and the Maine Network of Healthy Communities with the Maine Department of Health and Human Services Offices of Public Health and Substance Abuse, formed the Public Health Work Group. The Public

Health Work Group comprises 26 members including representatives from the Governor's Advisory Council on Health Systems Development, the Maine Public Health Association, the Maine Association of Substance Abuse Providers, Maine Network of Healthy Communities, Community Partnerships for a Healthy Maine, the Cities of Portland and Bangor, the Maine Medical Association, Communities for Children and Youth, Maine Center for Public Health, University of New England, the Maine Hospital Association, Maine Primary Care Association, the Heart, Lung and Cancer Associations, Healthy Maine Partnerships, the Maine Municipal Association, the Department of Education and representatives of the Legislature's Health and Human Services Committee.

The Plan incorporates the recommendations emerging from this collaborative process, including a set of recommendations designed to improve coordination of existing fiscal resources, to use the strengths in Maine's existing network of public health organizations and community coalitions in order to build a statewide system of organizations and comprehensive community coalitions. Like an effective transportation system, this system will build upon existing local roads to assure their interconnectivity and access to major highways.

Additionally, the Public Health Work Group proposes a process using local, regional and state public health infrastructure to identify and assure the delivery of all ten essential public health services in each area of the state. This step will be pivotal to Maine's achieving its goal of having an identifiable statewide public health infrastructure that has capacity to address a myriad of current and future threats to the public's health. While no one organization necessarily needs to deliver each and every one of the ten essential services, we need to build a system that assures each service is addressed in all areas of the state and one that has clear lines of responsibility, accountability and communication.

Objectives for the Work of the Public Health Work Group

The Public Health Work Group will serve as the primary vehicle for ensuring the integrity of Maine's local public health infrastructure. To that end, there is a great deal of difficult work to be done. The objectives of this work include:

- **Implement a Statewide Community-Based Public Health Infrastructure that Works Hand-in-Hand with the Personal Healthcare System –**Maine will develop a system with community coalitions and sub-state health departments that results in effective partnerships with local and State organizations

to assure delivery of the 10 essential public health services. This will include evaluation of organizations and coalitions with performance standards as well as coordinated State contracting and State oversight.

- **Assurance of Coordinated Funding for Sub-State and Local Entities –** Maine DHHS will develop a plan and issue an RFP for 2007 that braids public health resources together that will provide incentives to meaningful community-level collaboration to most effectively reach highest-risk populations, that will provide for more efficient program administration and help assure the essential services of public health are delivered across the State.

- **Streamlining of Reporting Requirements for Maine HHS Grantees –** Maine Center for Disease Control and Prevention and the Maine Office of Substance Abuse (OSA) will establish one-stop web-based reporting tools to simplify data and administrative reporting requirements for grantees.

- **Improvement of Sub-State and Local Public Health Assistance –** Maine DHHS technical assistance for community-based organizations will be more mutually-beneficial.

- **Development of a Conduit for the State Health Plan –** The community-based public health infrastructure will determine the flow of information and resources pertaining to the State Health Plan.

- **Initiation of Action with Federal Agencies and National Foundations to Improve and Increase Funding for Public Health in Maine –** We will invite federal agencies to discuss how they can assist us in achieving Maine's goals, including streamlining complex processes at the federal level. We will seek additional support from national foundations. Additionally, we will support the Federal Youth Coordination Act, now pending in Congress, that will assure coordination of funding to states to best meet our unique systems and goals.

- **Improvement of Maine's Public Health Workforce Capacity –** Accessible education programs will be developed that lead to a standardized credentialing for community health and prevention specialists.

Emergency Preparedness

At this time in our history, it is particularly important to give

attention to the strengthening of our public health infrastructure. Since 9/11 Maine, along with other states, has been made more aware of the need to prepare for all types of public health emergencies. An essential aspect of the mission of public health is to ensure coordinated services during public health emergencies to reduce death and injury. Additionally, public health must also assist in damage assessment and the restoration of essential health and medical services in an area impacted by an emergency situation. Public health must also coordinate action to be taken during any type of event that adversely affects the health of the people of Maine. While the likelihood of Maine experiencing a terrorist attack or a devastating earthquake is relatively low, we are likely to experience the impact of pandemic influenza. We need to work to ensure that we are ready to deal with that eventuality.

For the better part of the past two years, hospitals, first responders, nursing facilities, health centers, schools and others have been collaborating with state officials on the development of plans for the medical response to a large public health emergency. Substantial progress has been made in this arena, and the work will continue, directed by the Maine Center for Disease Control. Once these plans are completed they will be incorporated, by reference, into this State Health Plan.

While the emergency preparedness planning centers focus primarily around the management of a public health emergency, we must also be cognizant of the impact other policies – such as those related to Certificate of Need priorities – might have on our ability to respond to health threats. The formal involvement of the Maine Center for Disease Control and Prevention in both the establishment of CON priorities and in the impact assessments of CON applications, is intended to ensure that these policies are administered in a way that complements our emergency preparedness capabilities and plans.

Importantly, it is simply not possible to do a credible job responding to a significant public health threat without a strong public health infrastructure – making our efforts in this areas that much more important.

How will this work help make Maine the healthiest state?

This work will impact our ability as a state to achieve improvements in our health status, as a result of more effective primary prevention and early intervention initiatives being successfully implemented across the state. Long range markers of success in this area will be reflected in improvements in benchmarks of our population's health status such as decline in the rates of risky behaviors including, but

not limited to, tobacco use, alcohol and substance abuse, lack of physical activity, poor eating habits, and so on.

In the shorter term, success in building our public health infrastructure will be measured by the extent to which every Maine community receives a similar level of public health services, demonstration of administrative efficiencies in the State's grants programs to local Healthy Maine Partnerships and Healthy Community Coalitions, as well as by development of policies designed to implement credentialing standards for public health, which will help strengthen Maine's public health workforce.

Tasks/Deadlines/Responsibilities

- The Governor's Office of Health Policy and Finance will reconvene the Public Health Work Group to establish an agenda for action to accomplish the tasks included in the State Health Plan – February 2006

- The Public Health Work Group will form "Core Competencies Subcommittee," which will develop core competencies, functions and performance standards system for comprehensive community health coalitions. Recommendations will be reported out to the Public Health Work Group, the Governor's Advisory Council on Health Systems Development and to the Legislature's Joint Standing Committee on Health and Human Services – August 2006

- The Public Health Work Group will also form an Interdepartmental Subcommittee which will include representatives of Communities for Children and Youth, the Governor's Office of Health Policy and Finance, DHHS including the Maine CDC and OSA, as well as the Departments of Education, Labor and Corrections, Conservation and Transportation. This subcommittee will develop an inventory of resources as well as a plan for the integration of funding sources to support the public health priorities and functions identified by this Plan. The Interdepartmental Subcommittee will provide a report on its work to the Public Health Work Group, the Governor's Advisory Council on Health Systems Development and to the Legislature's Joint Standing Committee on Health and Human Services – October 2006

- Maine DHHS will make recommendations to the Public Health Work Group on what core functions and deliverables can be supported with existing categorical resources, including through braided together funding – November 2006

- Public Health Work Group will make recommendations on service areas for braided public health funding to help achieve administrative and programmatic efficiencies, improve health outcomes, and preserve existing appropriate community-based capacity – November 2006

- Maine DHHS will implement joint reporting requirements and system for OSA and HMP grantees – September 2006

- Maine DHHS will complete building linkages to the University System to provide local partnering organizations with enhanced resource availability – September 2006

- The Public Health Workgroup will develop and implement plans for conduits for the multi-directional flow of information, resources, and feedback regarding the State Health Plan – September 2006

- The Public Health Work Group will write report on interim progress and disseminate to stakeholders, including Legislature's Joint Standing Committee on Health and Human Services Committee of the Legislature and the Governor's Advisory Council on Health Systems Development – September 2006

- The Governor's Office of Health Policy and Finance will convene a meeting with federal agencies to include Maine public health leaders (Public Health Workgroup plus State leaders) -- to discuss how they can work together to achieve Maine's goals – September 2006

- Maine DHHS, in consultation with the Public Health Work Group and other appropriate stakeholders, will develop collaboration strategies for communities and state agencies for upcoming WIC, HIV/STD, substance abuse, and home visiting requests for proposals to assure continued improvements in public health infrastructure and community public health capacity – December 2006

- Maine DHHS will work with the Public Health Workgroup to determine how State public health technical assistance for community-based organizations can be more mutually beneficial – December 2006

- Regional epidemiologists are co-located with Public Health Nurses and Health Inspectors – January 2007

- The Public Health Work Group will make recommendations for

developing and implementing a training and education program leading to prevention specialist credentialing – January 2007

- The Public Health Work Group will report to the Governor's Advisory Council on Health Systems Development and to the Legislature's Joint Standing Committee on Health and Human Services on any actions taken with regard to the core competencies, functions and performance for comprehensive community health coalitions, the resource inventory and the integration of funding sources. This report will include identification of administrative units and regions of the purposes of administration, funding and the effective and efficient delivery of public health services – January 2007

- Joint Healthy Maine Partnership (HMP) - Office of Substance Abuse (OSA) request for proposals released and contracts awarded that address tobacco, physical activity, nutrition, and substance abuse goals. These funds will primarily address these specific health outcomes; will also strive to improve public health infrastructure and capacity statewide for community health coalitions and sub-state public health departments – June 2007

- Public Health Work Group will continue to monitor and report on progress and advise the State Health Plan and others – on-going

- The Governor's Office of Health Policy and Finance and other state officials will work with Maine's Congressional delegation to encourage the enactment of the Federal Youth Development Act – on-going

MAINE'S HEALTH CARE WORKFORCE – ANOTHER VITAL COMPONENT OF OUR INFRASTRUCTURE

Maine has a robust health care industry, providing more than 75,000 jobs in 2004 (13% of all jobs) and accounting for 14% of all wages paid in Maine in that year. This is much higher than the national experience, where health care accounts for 9% of both jobs and total wages. About 31% of these jobs are in nursing and residential care facilities, 38% in hospital settings and 32% in ambulatory care settings, such as offices of doctors, dentists or other health care practitioners, clinics, labs, home health agencies and other health care organizations. The distribution of jobs across types of ambulatory care setting is similar in Maine to that of the nation as a whole, although we have a higher number of nursing care jobs relative to population. The employee turnover rate in Maine's health care sector is lower than average for all Maine businesses, with higher turnover in lower paying health care jobs. The Maine Department of Labor forecasts a 27% rise in the number of health care jobs between 2002 and 2012. [39]

Despite the vitality of the industry, there is a general perception that our workforce might be inadequate to meet the needs of our population. The burden of chronic illness among our residents and the continued "graying" of our population generate a growing need for not only clinical care but supportive care as well. The continued broadening of the "scope" of the health care delivery system, with more and more care migrating off of the hospital campus to sub-acute and community-based sites, and the stunning pace at which medical technology is changing the face of medicine results in the need for health care professionals and paraprofessionals across a broader continuum of delivery sites and with a broader range of skills than ever before.

The issue of the healthcare workforce is one in which interest tends to ebb and flow over time – probably because it such a complex topic. The most recent wave of interest was sparked in 2001 with a report from The Committee to Address the Health Care Skilled Worker Shortage, a group comprising representatives of the health care industry, educators, employers and professional organizations, and legislators.[40] This report called for the formation of a Health Care Workforce Leadership Council, a call which was answered by the passage of a Legislative Resolve (chapter 89) adopted in the second regular session of the 120th Legislature. That Resolve created the Council with the purpose of providing input on policy initiatives, laws and rules concerning Maine's skilled health care workforce to the Commissioners of Health and Human Services and Labor. In this

instance "skilled health care workforce" was defined as health care workers who need a postsecondary education for their occupation, but specifically excludes physicians.

The Council issued its final report and recommendations to the Legislature's Joint Standing Committee on Health and Human Services in October 2004. The report contained three major recommendations:

- That the work of the Council be continued through the revitalization – and funding – of the Health Workforce Forum, a collaborative comprising health professionals, employers, licensing agencies educators and the Department of Labor;
- That the State be charged with the collection of data on projected employment demand, and the existing supply of licensed, registered or certified health care workers, as well as students enrolled in or graduating from health care educational programs; and
- That the data collected by the State be reported out annually to the Health Workforce Forum, for use in developing policy recommendations regarding health care workforce issues in Maine.

Other recent work in this area include a series of reports on health care workforce needs, one focused specifically on the workforce in the Lewiston/Auburn region,[41] one targeting the geriatric provider workforce][42] and a third more comprehensive look at the entire healthcare workforce in Maine.[43]

OMNE Nursing Leaders of Maine conducted a survey in the fall of 2005, to gather data relative to Maine's nursing workforce. This survey found that there are currently 503 nursing vacancies within Maine hospitals, long term care facilities, home health agencies and hospice providers. The projected number of vacancies is expected to double – according to survey respondents. OMNE's work points to growth in the number of graduates from Maine's nursing programs. However, an estimated 600 applicants to these programs were placed on waiting lists due to limits in the capacity of these programs to accommodate all interested students. At the same time, licensing data show that the mean age of licensed nurses in Maine is just under 50 years old.[44] The demographic trend in Maine toward a population dominated by elders promises a growing burden of chronic illness in our state. We need a nursing workforce that is "right sized" for our population's needs. The findings of this and other recent work on this issue seem to indicate a need to pay closer attention to how we might find that "right size."

Out of the call for action from the Health Workforce Leadership Council came specific legislative action, in the form of the passage of LD 892, *An Act to Ensure an Adequate Supply of a Skilled Health Care Workforce*. This Act, signed into law on June 8, 2005, directs the Department of Labor, working in conjunction with the Department of Health and Human Services, to compile a health care occupations report, to be published each September. This report is to include an inventory of all health care occupations licensed, registered or certified under the terms of Maine law (including physicians), with the minimum educational requirements for each occupational category, the schools in Maine offering relevant educational programs, the average starting salary for each job category, the availability of financial aid for those programs and an analysis of current and likely future trends in employment supply and demand for these occupations. In addition, the new law requires the surveying of all licensed, registered or certified health professionals in Maine, to determine demographics (age, gender, race), where they live and work, their current employment status (including specialty, full/part time status, etc.), their educational background, their future career plans and, if they are not working in the health care field, the reasons for that decision.

The statute goes on to direct the Department of Health and Human Services to convene a health workforce forum once each year, to review the data and analyses conducted in accordance with this law and to provide advice regarding changes in policy based on those findings. This work is to be funded out of the state's emergency preparedness funds. It appears that the legislation addresses the major recommendations from the Council and sets the stage for a consistent tracking and review of the status of the health workforce in Maine. The Governor's Advisory Council on Health Systems Development will monitor the work undertaken as part of the initiative, so as to factor it in its evaluation and development of strategies in the future.

There are two particular issues related to the health workforce that are not addressed by the recent legislation. The first is the trend observed in Maine – and elsewhere – of the acquisition of physician practices by hospitals. According to the Maine Medical Association, approximately one-third of Maine physicians are now employed by hospitals, rural health centers or other entities. This trend may be spurred by communities' growing difficulty in attracting and retaining physicians without significant salary guarantee provisions; hospitals often find themselves in the position of providing the capital for such programs. Younger doctors may also find it more convenient to avoid the work of running their own businesses, opting for employment by the hospital – which also covers the cost of malpractice insurance for employed physicians – as opposed to

working out of a private practice.

This phenomenon has impacted the MaineCare budget, as hospital based physician services are reimbursed at a different (and often higher) level than are non-hospital based physician services. Apart from this consideration, some may be concerned about the impact this trend may have on patient choice, with the supply of privately practicing physicians diminishing.

Second, the public health workforce is a sector of the health workforce that is not addressed by the legislative initiative. While Maine has a robust voluntary community working in the area of public health, some believe the state has a shortage of qualified public health personnel[45] – these are the professionals who are going to be critical to our efforts to nurture a comprehensive, effective and efficient public health system, and to improve the health of Mainers across the state. As discussed in an earlier section of this Plan, the Public Health Workgroup will be addressing this issue, in part, by developing recommendations for a training and education program leading to prevention specialist credentialing.

It is interesting to note that the reports cited here compare a growing demand for healthcare workers with the supply of such workers, as opposed to relying on a rigorous assessment of the *need* for additional workforce resources. "Need" and "demand" are not the same; we know that we have an almost insatiable demand for services, but we also know that we do not need as many services as we can possibly use. In fact, too much health care can be bad for our health!

Those who advocate strongly for additional investment in our healthcare workforce, rely on national benchmarks – not rural benchmarks - as a model for what Maine should "look like." These arguments often lack a framework for evaluating what level of human capital is necessary to deliver the right care at the right time in the right place. The new statute enacted in the most recent legislative session embraces an approach of gathering more data on our current workforce and using the data in modeling future need for healthcare professionals in Maine. Hopefully, the analyses used in this forecasting exercise will incorporate a measure of need for services, not just demand for those services. This is important in light of other research that has shown that capacity – including the number of health care providers – has a good deal of influence over the demand for services.[46] The Legislature has, however, adopted an appropriate strategy for beginning to address the issue of workforce in Maine in a sustained, consistent manner; there is no need to alter this approach at this time.

How does this help make Maine the healthiest state?

We need to have the right types and numbers of people working in health care and public health to ensure that all Mainers have access to the right care at the right time in the right place – one of the most important factors in our realizing our goal. Also, protection of the public's health, generally, through enforcement of environmental rules, safety rules and so on, is critical to our having communities that are safe places to live, work and play.

Tasks/Deadlines/Responsibilities

The work required by the Legislature and discussed above is assigned by statute and is currently underway. It is therefore unnecessary to address timeline and responsibilities for this task in the State Health Plan. Similarly, the work related to the public health workforce is addressed in an earlier section of this Plan.

TELEMEDICINE & ENHANCING OUR ABILITY TO DELIVER CARE

Telemedicine refers to the use of telecommunications technology – ranging from telephone to real-time video and internet connection – to provide health care services to patients who have physical or geographic difficulties in accessing services from physicians or other health care providers. It can be particularly useful in a rural state like Maine, where some health care services are distantly located from the community. These distances can prove particularly difficult for frailer or older individuals; bad roads or poor weather can make travel even more challenging.

Telemedicine has the potential to ease the hardship facing rural residents who sometimes must take a day off work– often without pay – to travel to the nearest large city to see a specialist. When appropriate access to health care services is facilitated, the chance that needed care is delayed or forgone is minimized. Delayed or forgone care can contribute to increased emergency department utilization and hospitalizations and poorer health outcomes. It also has the potential of improving "presentee-ism" in our workplaces and schools, enhancing productivity by reducing time lost due to having to travel to receive care.

Telemedicine can also be very useful in the prevention, early detection, effective treatment and rehabilitation of chronic illnesses by providing greater access to providers, increased participation by patients in their own care, earlier identification of signs and symptoms and quicker treatment for these symptoms. Telehealth (another term for "telemedicine") holds particular promise for patients with chronic illnesses such as heart disease or diabetes and for enhancing access to mental health services through telepsychiatry.

Using funding from a variety of federal and private sources, the Maine Telemedicine Services (MTS) at Healthways Regional Medical Center of Lubec has been instrumental in helping to develop a robust telemedicine infrastructure in Maine, supplying, maintaining, and providing technical assistance for telemedicine equipment at numerous hospitals, clinics, and other facilities across the state. MTS and a task force working on telemedicine issues also negotiated discounted ISDN – Integrated System Digital Network (the communication line over which telehealth audio and video are transmitted) – rates from Verizon for providers using this equipment; MTS serves as the liaison between these providers and Verizon.

However, there is evidence to suggest that the current telemedicine infrastructure is not being used to its full advantage. Barriers to more widespread use of the technology were identified at a meeting convened in April 2005 by the Maine Health Access Foundation. An *ad hoc* workgroup convened by the Foundation comprising a range of stakeholders with an interest in telehealth identified these barriers which include: [47]

- **Licensing –** Some believe the state licensing process for telemedicine is cumbersome and might be streamlined to increase cost-efficiency for both the state and providers, while simultaneously improving quality.

- **Credentialing and Privileging** – Hospitals may not be comfortable accepting reciprocity for the credentials of visiting physicians, even those providing services solely by telemedicine. This can create a need for providers to become credentialed to work for a number of different institutions, which can be costly and time consuming for the physician as well as for the hospital, and thus serve as an impediment to telemedicine use. Further, credentialing requirements of accreditation organizations (like the Joint Commission on Accreditation of Healthcare Organizations and the National Committee for Quality Assurance) may present challenges to providers who are simultaneously trying to make telemedicine work for their clinicians and patients and trying to maintain their accreditation status. [48]

- **Lack of information, familiarity, and comfort –** Both patients and providers may not be entirely comfortable with this new mode of delivering care. More work needs to be done to identify a clear evidence base defining which services are and are not appropriate for telemedicine. This, combined with outreach to providers and patient to acquaint both groups with that evidence and with telemedicine's costs and benefits – could increase its appropriate use.

- **Reimbursement** - The use of telemedicine might be encouraged by payers' willingness to reimburse for telemedicine services, and by payers clearly articulating guidelines regarding the reimbursement for telemedicine use. Currently, Medicare pays for some telemedicine services as if the care was being delivered face-to-face; MaineCare pays for telemedicine services if the provider has met certain standards for the provision of such care, including having appropriate equipment, a quality plan and if the patient has explicitly provided informed consent;[49] Anthem often pays for telemedicine services without inquiring as to whether this

was how the provider cared for the patient; and Aetna will not pay for telemedicine services at all.

Another reimbursement issue is how any payment made is allocated between (a) the provider delivering care via telehealth, and (2) the "host" institution (where the patient is physically and the telemedicine equipment are located). For example, a small rural hospital using its telemedicine equipment to transmit to an urban provider must have a mechanism to finance use of its infrastructure. However, if the financing mechanism used results in decreasing the reimbursement for the urban, consulting provider below the level ordinarily received for seeing patients in person, there is a reduced incentive for the distant provider to accept rural telemedicine patients.

The MeHAF telemedicine workgroup met as a whole on two occasions over the past two years; several smaller subgroups have been meeting more frequently. In the interest of enhancing appropriate access to necessary care, we believe it would be helpful to renew the work of this group, in an effort to move the issue another step forward.

There are several other issues not specifically referenced by the MeHAF working group that could be contributing to the slow uptake of this type of service delivery. Liability issues are one possible impediment; it is not clear how medical malpractice insurers are dealing with the potential risks associated with practicing medicine at a distance. The penetration of Internet connection in Maine homes may also influence the level of familiarity and comfort our state's residents have with the electronic information exchange, or even with getting medical information in a manner that is other than a face to face interaction; this may be especially true for our older residents. This challenges medicine's ability to interact with patients in their own homes.

Over the coming year, GOHPF and the Maine Health Access Foundation will work collaboratively to reconvene the telemedicine workgroup and build on its prior work. In addition to re-inviting original participants, GOHPF and MeHAF welcome the participation of interested parties from the provider community, payer community and consumer advocacy groups. State government offices that will be invited to participate include DHHS's Office of Rural Health Primary Care, DHHS's Office of Licensing and Certification, and DFPR's Office of Licensing and Registration.

The workgroup's goal will be to develop strategies to help Maine achieve an appropriately-developed, utilized and reimbursed

telemedicine infrastructure that serves the best interest of patients. To achieve this goal, the workgroup will work both to determine the correct balance between any new expenses associated with this method of care delivery and the effectiveness of the service, and to investigate ways to address previously identified barriers.

The workgroup will develop its own workplan, but specific tasks will include:

- Using appropriate working subgroups, development of specific strategies to overcome the barriers to the use of Maine's existing telehealth resources;
- Identification of models of best practice of telemedicine currently existing in Maine and recommendation of strategies to replicate those models in other parts of the state;
- Identification of necessary safeguards to ensure the safety and quality of telemedicine for those patients relying on it;
- Defining the parameters of data that will be collected to track the use of telemedicine for different services in different part of state over time; these data will help assess the effectiveness of the interventions cited above.
- Development of alternatives for encouraging reimbursement of telehealth services.

Additionally, the Maine Quality Forum will consider the task of identifying evidence-based guidelines for the use of telemedicine. The objective of this work will be broad based consensus among providers, consumers and payers regarding the appropriate use of telehealth services.

How will this help make Maine the healthiest state?

By exploring ways in which we can efficiently and appropriately enhance and strengthen our health care infrastructure, we can identify ways to make needed services more accessible to greater numbers of Maine residents.

One of our goals is to ensure that all Mainers get the right care at the right time in the right place. If we can use telemedicine in a cost effective manner, we can bring needed services closer to home for many of our rural residents and to Mainers who have difficulty getting to a provider site of care, increasing the chance that they will, in fact, get the right care at the right time.

Tasks/Deadlines/Responsibilities

- An expanded telemedicine workgroup is reconvened via a joint invitation from the Maine Health Access Foundation and the Governor's Office of Health Policy and Finance, and will develop a workplan for addressing the range of tasks outlined above – May 2006

- The telehealth workgroup will fashion final recommendations to the Governor regarding the future of telemedicine in Maine and, if appropriate, recommendations regarding how to advance the telemedicine agenda over time – November 2007

STRENGTHENING MAINE'S RURAL HEALTH SYSTEM

This Plan places a focus on strengthening Maine's local public health infrastructure. We have to be particularly mindful of the state of the health system in our more rural communities. These considerations involve not only the infrastructure for health care delivery in these areas of Maine, but on the *systems* aimed at promoting and preserving health. These aren't exclusive of one another; instead, they are mutually dependent.

The health care delivery system continues to experience shifts in utilization patterns and a continuing trend in the movement of many types of services off of the hospital campus. This trend is unlikely to reverse itself and puts the future of the small, rural hospital into considerable flux. The impact of many of the changes already underway is being reflected in financial statements of many of these facilities. While Medicare and Medicaid payment policies at both the federal and state levels play a role in the financial health of small, rural institutions, the environment in which these organizations (as well as other parts of the rural health system) operate present the biggest challenge to their operating margins.

At the same time, these facilities often provide critical services to their communities, providing, for example, 24-hour emergency department availability and local access to lab and imaging services. Local access to these kinds of services is vital to the integrity of a robust community. As the health care system continues to evolve, though, these facilities will find themselves serving more and more difficult or acutely ill patients, as healthier patients (and those less costly to care for) are diverted off campus to other sites of care. Patient volume will continue to decline and the fixed costs of operating a hospital – which are considerable – are left to be spread over a shrinking number of patients, contributing to the upward spike in the cost of care and leading to an increasing likelihood of patients passing by the local hospital for less expensive delivery sites.

This "catch-22" and the potential impact it holds for our rural communities, merits careful and measured consideration. As the role of the hospital evolves, as market pressures on small facilities continue to exercise themselves, as the health needs of communities change and as other components of the system of rural health shift in capacity and focus, our ability to ensure the all Mainers – including residents of our rural areas – may be as healthy as possible. We must affirmatively and actively address this issue rather than waiting to react to a crisis.

Elsewhere in this Plan, we discuss efforts to develop and strengthen Maine's public health infrastructure, with an eye toward the roles played by local public health organizations. This is a vital aspect of ensuring we have a robust rural health system. We must consider, too, the issues of the rural hospital, other aspects of the delivery system and other "players" – organizations, agencies and so on – that form the fabric of the rural health system in our state, and how these varying aspects of the system can be supported to meet the changing needs of their communities.

The Governor's Office of Health Policy and Finance, in collaboration with the Maine Department of Health and Human Services, the Maine Hospital Association, the Maine Medical Association, the Maine Osteopathic Association and the Maine Primary Care Association will convene a study group to develop policy recommendations for addressing the challenges faced by Maine's small and rural hospitals and the infrastructure that interacts with those facilities to form the backbone of the rural delivery system. Participants in this group have to over-represent rural providers and consumers, although representatives of Maine's health care systems and insurers must also be included. The group will consider strategies that might be undertaken by communities, insurers, businesses, health systems, and health care professionals to meet the urgent and emergent health care needs of rural Mainers. Additionally, the group will develop recommendations regarding rural health policies, reimbursement policy, licensing policy and other related issues that might be undertaken by the state and/or federal governments with regard to this issue.

This undertaking is *not* a replication of the work carried out by the Commission to Study Maine's Hospitals, which completed its work early in 2005. Instead this initiative is intended to examine the rural health system, as a whole (not the hospital exclusively), to develop policy direction for ensuring a vital, effective and efficient health care system for rural Maine.

How will this help make Maine the healthiest state?

If we fail to pay attention to the shifting environment in which rural health care providers operate, we risk finding ourselves faced with situations where our health care system is unable to meet the changing needs of our communities. One of the most important tools at our disposal is a healthy health care infrastructure, appropriately designed to meet our needs and able to be supported with a realistic level of resources. This allows us to get the right care at the right time in the right place – which we need in order to become the healthiest state.

Tasks/Deadlines/Responsibilities

- The Governor's Office of Health Policy and Finance, in collaboration with the Department of Health and Human Services, will solicit cooperation from the Maine Hospital Association, the Maine Medical Association, the Maine Osteopathic Association and the Maine Primary Care Association, in forming and supporting a Rural Health Working Group – April 2006

- The Governor's Office of Health Policy and Finance, with the collaborating organizations, shall convene a first meeting of the Rural Health Working Group – June 2006

- The Rural Health Working Group will report out policy recommendations to the Governor and the Advisory Council on Health Systems Development, intended to strengthen Maine's rural health systems – December 2006

- The Department of Human Services will rely on the recommendations of the Rural Health Working Group to develop a revised Rural Health Plan for Maine – June 2007

OTHER ASPECTS OF INFRASTRUCTURE – RESOURCE ALLOCATION

Making Maine the healthiest state requires allocating resources to prevention and to efforts to address chronic illness. It requires changes to the system of care and the re-direction of resources to incentivize wellness while continuing investment in the essential services of our current care system.

Two of the purposes of the State Health Plan laid out in the law is to assist in the determination of the level of capital investment Maine will make in health care each year and to guide the approval of applications for Certificates of Need by the Department of Health and Human Services, as well as lending decisions made by the Maine Health and Higher Education Facilities Authority. Specifically, the law requires that a Certificate of Need application or request for public financing cannot be provided unless the project meets the goals explicitly outlined in the State Health Plan.[50]

Certificate of Need is a regulatory program that reviews and either approves or denies certain types of projects undertaken by health care providers. In Maine, Certificate of Need review is required for the expansion of existing services or facilities that cost more than a certain amount, the establishment of new services or substantial reductions in capacity of certain types of providers.

In this state, only about 26% of all capital investments made by health care providers (and hospitals are the type of provider most often impacted by CON requirements) fall under CON scrutiny.[51] Those projects that do require review, however, are evaluated by the Department of Health and Human Services, which assesses the proposals against a variety of quality, cost and access considerations.

One of the constraints the law puts on Certificate of Need is an annual limit on the dollar value of the projects approved by the Department of Health and Human Services, which are allowed to go ahead with implementation. This limit is called the Capital Investment Fund (CIF) and is set by the Governor's Office following guidelines approved by the Legislature. The intent of the CIF is to ensure that the infusion of new capital into Maine's health care system remains balanced with Mainers' ability to financially support the added costs of those new investments.

Depending on the number and the cost of proposed projects up for

review, the Capital Investment Fund (or "CIF") may or may not be large enough to accommodate approval all of the pending applications. For instance, if the CIF is set at $6 million and projects for which review is sought total a combined value of $8 million where no one project exceeds $2 million in costs, not every project will be able to be approved; only $6 million worth of projects can go ahead. In that situation, proposals will compete with one another, with those deemed by the Department of Health and Human Services to be the best applications being approved; the remaining proposals will be turned down.

Each year, the Governor's Office of Health Policy and Finance establishes a new value for the Capital Investment Fund. The way in which this value is set out broadly in law and more specifically in regulation. For a more detailed discussion of the Capital Investment Fund and how its value is determined, please refer to Appendix Two.

Setting Priorities for Certificate of Need

Maine law requires that the State Health Plan set out priorities for the types of projects that should be approved under our Certificate of Need Program. That is the specific purpose of this section of the Plan.

In evaluating and prioritizing projects submitted in accordance with Maine's CON statute, the Department of Health and Human Services is guided by these priorities. Insofar as the statute at 22 MRSA §335, sub-§1 directs the Commissioner of the Department of Health and Human Services to approve an application for a CON if the project is, among other things, consistent with the State Health Plan, it is important that this Plan clearly lay out criteria for projects.

In doing so, we have to recognize the limitations of Certificate of Need. Between 1997 and 2002, only 26% of hospital capital expenditures were related to approved CON projects; the remaining 74% were not subject to CON review.[52] We must therefore, strive to maximize the usefulness of this planning tool to ensure that the largest capital projects (those subject to CON rules) are rigorously reviewed for adherence to planning principles, assisting in the orderly development of a high quality health care system for Maine.

The Department of Health and Human Services has recently named a new Director of Certificate of Need and has moved the office into the Commissioner's office. This "relocation" signals the level of importance the CON function plays in Maine's health care landscape and will ensure that the Commissioner has ready access to the information and resources needed to arrive at sound decisions

regarding the approval or denial of application requests.

What's needed where?

There is great interest in having the State Health Plan provide guidance regarding how many of which kinds of services Maine needs where. Some may be disappointed that this Plan is not more prescriptive, but that is a difficult charge to carry out.

In 2003, Maine's level of community hospital beds[53] at 290 per 100,000 residents was the highest in northern New England, including Massachusetts.[54] Maine, along with 10 other states, formed the middle tier of bed "density" in the nation, all having 260 – 305 beds per 100,000 residents, compared to a national figure of 280 beds for every 100,000 residents.[55] At the same time, Maine is one of the least densely populated states. That is part of what drives our relatively high bed count – the fact that our population is dispersed over a very large geographic area contributes to the fact that we have more hospitals and more beds than you might otherwise expect.

Research has shown that the supply of hospital beds influences the rate of use of those beds; that is, the more beds there are available, the more often they tend to be used.[56] For instance, about half of the variation in rates of discharge for patients hospitalized for any medical condition can be explained by the supply of acute care beds.[57]

In light of the documented tendency for supply-induced utilization and given the already high bed count in this state and the fact that patient care is continuing its "migration" away from the inpatient setting, and the average length of stay is declining, we do not believe new community beds are needed in Maine at the present time.

Providing guidance for other types of services is more difficult. The rate at which basic science moves forward and the rate at which new technologies are developed and moved into the marketplace will continue to outpace researchers' abilities to rigorously test them for their impact on outcomes of care or, for that matter, the quality and appropriateness of their use. It is difficult to rely on health care market forces alone to assure quality and appropriateness; the consumer reaction to managed care's attempts to exercise this type of influence demonstrates a public distaste for the "intrusion" of external forces into the patient/physician relationship.

As noted above, there is ample evidence of the reality of supply-induced demand, most especially with regard to services for which

there are few documented clinical guidelines. Many of these "supply-sensitive" services are used in treating patients with chronic illness[58] - and chronic illness is one of Maine's major health challenges. These services include, but are not limited to, imaging procedures and diagnostics, but also include use of intensive care units and hospitalizations. Use of these services is influenced, in part, by an underlying premise that "more is better." Yet we know that isn't true. The United States – and Maine - spends more per capita on health care than any other industrialized nation,[59] yet our level of health attainment falls 24th among such nations.[60]

Some care is categorized as "supply sensitive care;" this includes physician visits, diagnostic testing, and certain types of inpatient care. The use of supply sensitive care is not driven by scientific evidence. Instead it an area's supply of hospital beds, physician specialists, specialized medical equipment, and so on, that drives its use.[61] Finally, those areas demonstrating high levels of supply sensitive services have higher levels of health care spending, which is associated with lower quality, poorer access to care and lower patient satisfaction, along with a somewhat higher risk of death.[62]

There are many examples of this phenomenon in Maine. The variation in the rate of hospitalization for adult medical conditions is one such example, with the rate ranging from 19% below the median to more than 40% above the median. The rate of hospitalization for chronic lung disease is significantly lower in the southern region of the state than it is anywhere else in Maine. For other examples, see the website of the Maine Quality Forum (www.dirigohealth.maine.gov) or *The State of Maine's Health,* published by the Governor's Office of Health Policy and Finance and also available at the Dirigo website.

We have to strike a balance between our ability to afford maintaining certain services in our "backyard" and the value the services may provide to patient care. Clearly, we cannot afford to establish services on this order in every community in the state, nor would that foster high quality services and good outcomes, but Mainers need to have reasonable access to such care.

Invasive cardiology and cardiac surgery are services that undoubtedly save lives and enhance the quality of life for many patients. They also carry with them high price tags and generate costly claims. In a 2000 report commissioned by the Maine Department of Human Services, Public Health Resource Group provides recommendations regarding how cardiac services in Maine should be developed.[63] These recommendations lay out thoughtful guidance, supported by clinical literature, regarding minimum volumes for diagnostic cardiology services, angioplasty and open

heart surgical programs, as well as suggestions for where such services should be located. This report cautions against the development of excess capacity because of the danger and cost associated with overuse. This report should be updated and used as guidance to set future priorities for CON approvals. The Department of Health and Human Services will commission such an update, to be completed prior to the commencement of the next large project review cycle.

There is also a continual challenge in the shifting boundaries between invasive cardiology and cardiac surgery, which is part of the evolution of cardiovascular care. The distinction between these two types of care is growing more difficult to discern. This situation is not confined to cardiovascular services. Gamma knives, for instance, may present similar "problems," blurring the line between old and new services – what is subject to CON review and what is not, how to balance cost and quality against the promise of a technological advance.

The Maine Quality Forum has been established, in part, to examine these types of questions. It is intended to serve as a forum for clinicians, payers and consumers to discuss the implications of new technologies and how Maine might best address the questions raised by them. The Maine Quality Forum represents a valuable resource for the Department of Health and Human Services as it works to assess CON applications and issues related to Certificate of Need, as it is a mechanism for bringing clinical and epidemiological expertise to bear on these issues.

The Department of Health and Human Services has recently finalized a Memorandum of Understanding with the Quality Forum to formalize a relationship for just such a purpose. This enhances the Department's CON evaluation capabilities, without additional cost.

Specific Priorities for CON Approvals

As noted above, under Maine's regulatory system, proposals requiring CON review may sometimes find themselves competing with one another for approval. Similarly, there are times when there are two or more applications pending for review that seek to implement the same type of project – a new cardiac surgery program, perhaps, or surgical center.

The Department of Health and Human Services' CON program has adopted rules that govern the manner in which the application review process will be conducted. Those rules rely heavily on guidance provided in the State Health Plan, which by statute, must

set out criteria to allow for the prioritization of applications submitted to the Certificate of Need Program for review and approval. This is important in situations where there are competing proposals. However, the priorities are helpful even when there are no competing proposals. A lack of competition does not mean that a proposal should necessarily be summarily approved. The priorities for CON set out in the State Health Plan are intended to guide decisions regarding approval, regardless of the competitive posture of any application.

Input from Other State Agencies

The most recently completed review cycle was the state's first experience reviewing CON applications under the new provisions of the Dirigo law. Four hospital applications were received and all were recommended for approval by the CON review staff; each was subsequently finally approved by the DHHS Commissioner.

During the course of the review process, the CON unit received – as required by statute – input from both the Bureau of Insurance and the Maine Center for Disease Control and Prevention and Prevention regarding each application. This input was to be factored into the Department's evaluation of applications. The Department, however, found it lacked clear guidance regarding how that input should be factored into its overall assessment. For instance, it is not clear what the outcome of a review should be if one of the two Bureau's provides a negative finding regarding the application. Additionally, the Bureaus' role in assessing each project relative to the State Health Plan was unclear. This Plan provides clarification on this point.

The law sets out the considerations that guide the Commissioner of Health and Human Services in decisions about the approval or denial of CON applications. These factors range from the ability of an applicant to actually provide the proposed service in accordance with relevant standards of care, to a demonstrated public need for the project and its impact on health status and health care spending. The Bureau of Public Health is called upon, by law, to provide an assessment of the likely impact of each proposal on the health of the population. The Bureau of Insurance is required to provide an assessment of each project's likely impact on the cost of health insurance premiums both locally and statewide.

Both of these assessments become part of the record that is used by the Commissioner in making final CON approval determinations. However, these assessments are not the sole considerations relied upon by the Commissioner, who may disagree with the findings of either Bureau and who is not bound by the findings of either. When the Commissioner's final decision on a CON application runs counter

to comments and recommendations in the record, that final written decision should address the reasons for departing from those comments and advice.

Relationship to the State Health Plan
The experience of the first round of competitive review also revealed a lack of clarity around the "tightness" of the connection between an application for CON and the priorities in the State Health Plan. While the Interim Plan was crafted in a way that was thought to be clear that *applications* – as opposed to *applicants* – had to satisfy one or more of the priority criteria, as a practical matter, applicants relied on organization-wide activities as evidence of satisfying priority criteria as opposed to making a case for the project itself meeting criteria.

This was not the intent of the Interim Plan. Therefore, in this iteration of the State Health Plan, the intent is once again articulated, in a manner meant to be clear, concise and without ambiguity.

A minimum requirement for approval under Maine's Certificate of Need law is that the project – *not the applicant, but the project submitted for review* – is consistent with the State Health Plan. This includes priorities established in this Plan for such projects; these priorities are articulated below.

Specific Priorities

- **Priority: Projects that protect public health and safety are of utmost importance.**

  Projects that directly and unambiguously protect the public's health and safety are assigned the highest priority in the current environment, where resources are constrained. Examples of such projects include:

  Projects that have as a primary, overriding objective the elimination of specific threats to patient safety;

  Projects that center on a redirection of resources and focus toward population-based health and prevention; such efforts address our state's greatest area of need. This includes addressing – at a population level as opposed to an individual patient level – the most significant health challenges facing Maine – cardiovascular disease, cancer, chronic lung disease, diabetes, depression and drug addiction; Projects that specifically incorporate as a primary component of the initiative for which

approval is being sought, a comprehensive scope of concern including prevention, early detection, treatment and rehabilitation of chronic conditions, especially cardiovascular disease, cancer, lung disease, diabetes, and depression. Such efforts will contribute to efforts to implement the care model across our communities and will encourage appropriate utilization of resources and maximize patient outcomes. At a minimum, priority projects will devote a portion of the total "value" or cost of the project to new investment in a related public health effort that is aimed at reducing the demand for the service proposed under the application at the population level. Projects demonstrating additional new investment in such public health initiatives should receive a higher priority ranking.

The Department of Human Services will convene an advisory committee comprising representatives of Maine hospitals, ambulatory care centers, health care professionals and experts in public health to define for the Certificate of Need Program what types of investments called for in this priority will "qualify" a project as having satisfied this criteria. This priority will be effective beginning with the large project review cycle slated for January 2007.

Projects that incorporate best practices in building construction, renovation and operation to minimize environmental impact both internally and externally.

- ***Projects that contribute to lower costs of care and increased efficiencies are also high priorities.***

  The rate at which spending on health care is increasing in this state is unsustainable, given current economic constraints. Projects that clearly demonstrate that they will generate cost savings either through verifiable increased operational efficiencies or through strategies that will lead to lower demand for high cost services in the near and long term should be given very high priority during the competitive review process. These types of projects may include:

  Projects that physically consolidate hospitals or services that serve all or part of the same area and that demonstrate an appropriate, cost effective use for the "abandoned" infrastructure, that do not result in increased costs to the health care system and that, in accordance with state policy as expressed in Maine's Growth Management Act,[64] do not contribute to sprawl; and

Telemedicine projects that facilitate improvements and cost efficiencies in the quality of diagnosis and treatment especially in Maine's smaller, rural communities;

- ***Projects that advance access to services and reflect a collaborative, evidence-based strategy for introducing new services and technologies are also priority projects.***

  Advances in health care are introduced on what almost seems like a daily basis. Often, these advances carry many promises – enhanced diagnostic and treatment capability, for instance, or improved patient or provider convenience – but do not include the promise of lowering the rate of increase in the cost of care or of necessarily substantially improving the outcomes of care. We need to be very cognizant of the costs that accompany the introduction of this type of new technology; historically it has not led to moderations in spending increases. Instead, it has often led to duplication in capacity and in increased demand for services.

  Importantly, this does not mean to say that Maine should shun adoption of new innovations in health care – that would be short-sighted. Instead, we need to step back from decisions to race to adopt the newest technologies and evaluate the costs and benefits of incorporating them into our health care system. This means asking ourselves if these advances represent interventions that have proven clinical effectiveness, improve patient outcomes and if they are cost effective.

- ***Projects <u>and/or</u> applicants demonstrating certain attributes should be deemed higher priority than those without those attributes.***

  Note that this criterion relates to attributes of *either* the proposed project for which CON review is being sought or to the applicant requesting application review. This contrasts with the other criteria, which specifically relate to attributes of the proposed project, *not* the applicant.

  There are certain activities and attributes that directly complement our efforts to make Maine the healthiest state and which relate to strategies laid out in this Plan. These "highest" priority assignments should be given in the following circumstances:

- ***Projects that include a complementary preventive component that will lead to a reduced need for services at the population level will receive the highest priority among all applications reviewed in a given review cycle.***

  For instance, a cardiac surgical program application that includes a comprehensive preventive program promoting heart health should be given priority over a cardiac surgical program without such a prevention component. A proposal for construction that employs "green" building methods, thereby protecting and promoting good environmental health, should be given priority over another project that fails to have a preventive component.

  This priority assignment is not constrained to proposals for similar services or similar purposes (for instance, to two construction projects). In any particular review cycle there may be a range of dissimilar projects; such is often the case. All else being equal, those projects incorporating prevention as a significant portion of the proposed activity must be considered of higher priority than those that do not. Investing in prevention is the key to the long term sustainability of our health and our health care system.

  Projects *and/or* applicants that demonstrate a tangible, real (as opposed to in kind) investment in the MHINT (Maine Health Information Network Technology) project should be assigned a higher priority ranking than applicants failing to make such an investment. These investments must be for hardware, software or direct financial contribution to the MHINT project.

  Similarly, applicants and/or projects representing real investments in electronic medical records systems both in the hospital and in community medical practices will receive a higher priority ranking than those applicants failing to make such an investment. Qualifying investments will support clinical data exchange between separate data systems or applications using accredited standards for the exchange of data such as HL7.

- ***Projects that exercise less than a 0.5% increase on regional insurance premiums shall be given priority consideration under the CON review process.***

  Experts have recently testified in Maine that every 1% increase in insurance premiums nationally is associated with

a reduction in the number of people with employer-sponsored coverage of approximately 300,000; in Maine, this equates to about 1,750 people.[65] [66]

Projects that do not reflect the priorities described above, shall not be considered priorities for approval by the DHHS Certificate of Need Program.

How does this help Maine become the healthiest state?

One of the most difficult things we need to do with regard to our health care system is to work to stem the tide of spiraling costs of care. The rate of increase at which our costs our growing is simply not sustainable. As costs continue to grow, fewer of us are able to afford the care we need or the insurance coverage to pay for that care. Fewer employers are able to afford to sponsor comprehensive insurance benefits. The result is that we fail to get the right care at the right time in the right place – which is a critical step in bringing us closer to our goal of becoming the healthiest state in the nation.

Tasks/Deadlines/Responsibilities

- The Department of Health and Human Services will convene a workgroup of relevant stakeholders comprising representatives of Maine hospitals, ambulatory care centers, health care professionals and experts in public health to define for the Certificate of Need Program what types of investments called for in this priority will "qualify" a project as having satisfied the criteria for investment in public health, discussed under the first priority for CON projects, above. This workgroup will be convened no later than June 2006 and shall complete its work by September 2006, in advance of the deadline for CON letters of intent for the January 2007 review cycle.

- The Governor's Advisory Council on Health Systems Development will review annually review the Capital Investment Fund value and the priorities for Certificate of Need, making recommendations for needed changes in either policy - on-going

CREATING A CULTURE OF HEALTH

Having the right infrastructure is simply not enough to get us to the position of being the healthiest state. It's necessary, but not sufficient. One important step we can take is to consider and appreciate where health begins – with each of us individually. We have to consider how to improve our own health.

The 2006-2008 State Health Plan launches the "**Be Fit for Maine's Future**" campaign. A healthier state means a more productive citizenry and businesses, lower health care costs and a commitment to a high quality of life. Each of us can do something more to improve our health, regardless of the challenges we face. Working with state, community and local public health organizations, health professionals, worksite wellness programs, private insurers, the Governor's Council on Physical Fitness, Sports, Health and Wellness, the Maine Center for Public Health and others, the Governor's Office of Health Policy and Finance will lead the development of a tool and strategy to stimulate individual action for better health.

The foundation of the "Be Fit for Maine's Future" campaign will be the creation of a Contract for Better Health. This will be a written commitment to another party – perhaps a family member, a friend, a colleague, health insurer or provider – to take certain actions to improve our own health. Research shows that this approach makes us more likely to take our pledge of action seriously, when we enter into the contract with our health care provider.[67] However, the "Be Fit" contract is intended to serve as a consciousness-raising tool, to encourage all Mainers to begin to think about what they can do to take the first – and next – step to health self-improvement.

This doesn't have to mean a major commitment to, say, losing 50 pounds, or running 5 miles a day. What we all need to do, though, is to start somewhere – identify one thing we can do that will improve our health and take it from there. Maybe you will decide to promise yourself that you will wear a pedometer and work up to taking the recommended 10,000 steps a day. Or maybe you will promise yourself to complete a health risk assessment and visit your primary care doctor to review it. If you already exercise regularly, maybe you'll promise that you will step things up a notch or two. It's up to you, but it's important to take the step and make the commitment. No matter our physical ability or current health status, there is *something* we can do to help improve ours situation.

The "Be Fit" contracts will be developed by a work group convened jointly by GOHPF and DHHS Public Health and will incorporate existing efforts now underway in Maine like DirigoChoice's Healthy

Maine Rewards program and other health risk assessment protocols. For example, the Keep Maine Healthy "5-2-1-0" tool created by the Maine Center for Public Health and the Maine Chapter of the American Academy of Pediatrics provides an example of a simple to understand, measurable tool to help children improve their health by eating 5 servings of fruits and vegetables, limiting screen time to 2 hours, exercising for 1 hour and avoiding soda each day.

The Be Fit for Maine's Future contract will be a similar checklist identifying areas for health improvement. The checklist will be signed by an individual and another party such as a physician, a family member or a member of the Healthy Maine Partnership or Healthy Community Coalition. Unlike a full health risk assessment, the checklist will identify specific interventions (lose weight, exercise more, stop smoking, see a mental health counselor), set specific goals (10lbs, walk a mile each day, call the Maine quit line, make a counseling appointment) and set timelines (within 6 months, every day for a year, be smoke free for a year by my birthday, 2007) for individual actions that are achievable.

Some individuals may choose to make an individual contract; others might choose a family contract that could enhance the health of everyone in their family. Each contract will be completely confidential in the same way all other medical information is confidential. Compliance with the contract will be assessed by the individual and the person with whom the contract is signed. This voluntary program will be well publicized and will allow individuals to elect with whom they wish to contract. The goal of the initiative is to drive home the message that a healthier Maine begins with each of us in collaboration with all those we look to for support and advice as we strive to take charge of our own health.

How will this help make Maine the healthiest state?

If each and every one of us begins to understand and take seriously responsibility for our own health, we will have taken an important step towards making our entire state healthier. The best health care system in the world cannot make us healthy if we don't work at it ourselves. More than that, if we don't take responsibility for ourselves and sit back and hope that the health care system will "fix" whatever might eventually ail us, the costs of the system will quickly become unaffordable. The services needed to "fix" us are expensive – can we afford to ignore our own role?

Tasks/Deadlines/Responsibilities

- The Governor's Office of Health Policy and Finance, with the Maine CDC, will convene a public-private workgroup to review current related activities, design the contract and dissemination strategies & means to measure progress – March 2006

- The working group will complete the "Be Fit" contract – September 2006

- GOHPF and the Maine CDC, assisted by the working group, will complete dissemination strategy to reach maximum number of Mainers – December 2007

- Governor's Office and Maine CDC will launch the "Be Fit for Maine's Future" contract initiative – January 2007

- Maine CDC and GOHPF will work with local public health organizations, MaineCare, providers to encourage participation in the program – on-going

- Maine CDC will add a question to Maine BRFSS to assess progress in engaging public in Be Fit For Maine contracting effort – effective for surveys in 2007

- Maine CDC will assure 15% of Maine people over the age of 10 have completed the contract by June, 2007

- The Maine CDC, GOHPF and the working group will set a new goal for 2007-2008 by September 2007

PROMOTING HEALTH IN THE WORKPLACE

Each and every one of us has an important part to play in helping Maine reach the goal of becoming the healthiest state in the nation. This Plan lays out roles for individual people, for health care providers, for local community organizations, for insurance companies and for government. And there's much that employers and the business community can do to bring us closer to our goal, too.

As health care costs have grown, many employers have launched efforts to promote health and prevent illness among their employees. Investing money and energy into this type of program makes sense, since poor health, including depression and substance abuse, affects productivity, which impacts a company's bottom line. Studies show that participation in health promotion programs can lead to significant decreases in the use of health care services, which can translate into lower health insurance premiums. Many employers have embraced health promotion and wellness initiatives as a way to retain and support employees while reducing growth in their premium costs.

There are impressive efforts by Maine employers in this regard. Worksite wellness initiatives are blossoming in the greater Bangor area, with the Bangor Region Wellness Council leading the way. The Council – a program of the Bangor Chamber of Commerce – works to provide leadership and support to area businesses interested in employing or improving workplace wellness initiatives for employees and their families. This effort is built on a national model developed by WELCOA – the Wellness Council of America – and relies on supportive mentoring and public recognition for participants who realize certain markers of success; companies meeting progress goals are recognized as "American's Healthiest Companies." [68] More than 50 businesses – large and small – with a collective employee base of over 20,000, are involved in this effort, and participants have seen marked improvement in wellness among the people they cover as well as moderation in the growth of premium costs.[69] The Council is now working to establish the first "Well Region" in the United States.

MaineGeneral Health, working with the Kennebec Regional Health Alliance physician/hospital organization, has crafted an approach that pulls from the "best practices" of a number of worksite wellness paradigms to build a program unique to its needs and employees. This program, known as "Your Health Your Choice" matches employees with a nurse, who serves as a kind of wellness coach. In

this voluntary program, employees complete a health risk appraisal and review it with their nurse, setting a personal goal and plan to improve their health status. The one-on-one sessions between the nurse and employee occur at regular 16-week intervals, to monitor progress, identify barriers to improvement and strategies to overcome those barriers. All participating employees receive a financial reward for taking part in the program, with employees who are successful in meeting their goals getting a larger reward. While the program is still too young to demonstrate definitive impact on health outcomes in employees – the program has only been in place a couple of years – MaineGeneral Health has seen a decrease in its per member per month health care costs for those employees participating in the initiative. This contrasts with the general experience of the non-participating employee group, which has had an increase in costs. The corporation is pleased with the program, believing it is moving in the right direction, and plan to continue the program in its present form.

Across the state, a number of organizations are developing programs and strategies to promote wellness and patient activation. The Maine Center for Disease Control and Prevention and Prevention administers a worksite wellness program that assists businesses in identifying opportunities for developing healthier "workstyles." In the private sector, individual faith communities are targeting their congregations, and regional planning efforts target groups engaged in public service. There are three regional wellness councils – the Bangor Council mentioned above, and similar organizations in the mid-Maine and southern Maine areas; these groups have a statewide umbrella organization called the Maine Worksite Wellness Council. These grass root efforts will likely serve to raise community awareness of and expectations for well workplace initiatives.

Another important effort underway focuses on improving the "health literacy" of groups of employees. Health literacy is defined as the degree to which a person is able to obtain, understand and use basic health information and services needed to make sound decisions about health and health care. [70] According to the Institute of Medicine, 90 million Americans have trouble understanding and acting upon health information; this can lead to less use of preventive services and higher use of expensive care (like emergency department services). [71] It has also been shown to be related to poorer health outcomes including an increased incidence of chronic illness. [72]

The Maine Health Management Coalition is a membership organization of employers, hospitals, physicians and insurers who are working collaboratively to improve the quality of health care in Maine. One of the Coalition's major projects is called "Pathways to

Excellence" and involves measuring a variety of aspects of quality of care at provider sites across the state, and publishing those measures in a public manner. The objective of this effort is to increase transparency and accountability for the quality of care delivered to patients by Maine providers.

At the same time, some employer members of the Coalition are working to "educate" their employees about the quality data, how to access it and how to use it to assist in making decisions about health care they need. Part of this effort involves developing peer experts within the workforce, who can mentor colleagues in the use of relevant quality data. The State Employees' Health Insurance Program has recently begun to work to develop this type of approach.

This is very hard work and employers and community organizations actively engaged in effective wellness efforts should be recognized for the contributions they are making. Larger businesses with aggressive wellness programs – like Northeastern Log Homes – who are self-insured or who are fully insured but experience rated, may realize relatively early returns on their investment in the form of moderating growth in insurance costs; smaller businesses that have community rated health insurance will have to wait longer to realize an impact on premiums – until efforts like this become so widespread that the entire community realizes a benefit. Most businesses, though, will quickly see benefit in the form of lower rates of employee turnover, higher satisfaction, less absenteeism and higher productivity.

While it has been suggested that more employers would likely pick up the wellness "challenge" if some type of financial incentive was provided, it is not clear where the needed financial resources to do so would come from, aside from lower premium costs. However, a statewide initiative to recognize best practices in the workplace wellness arena, along with a concerted effort to replicate those best practices in as many workplaces across the state as possible, would be helpful in nurturing a broader culture of caring.

Toward that end, the Governor's Office of Health Policy and Finance in conjunction with the Maine Quality Forum will launch a new program dubbed the "Dirigo Wellness Star," that will focus on the dissemination of best practices in workplace wellness and will provide support and assistance to employers choosing to voluntarily participate in the program. Special consideration will be given to approaches that are in use across the nation, so as to capitalize on a broader base of resources. The WELCOA approach to promoting workplace wellness holds special interest in this regard.

The initiative will be developed in collaboration with representatives of Maine's three Regional Wellness Councils. It will result in a coordinated effort predicated on proven strategies and relying to the greatest extent possible on already developed tools. This new program will both reach out to the business community in active dissemination and will serve those employers approaching the program for assistance. A special focus will be given to businesses enrolled in DirigoChoice.

The "Dirigo Wellness Star" program will also provide statewide recognition of businesses and organizations that demonstrate leadership in implementing successful workplace wellness programs. The benchmarks for success will be related to outcomes that demonstrate financial and/or behavioral returns on investment, arising from improved health employee health status, service use, and organizational change and learning. There will be two prongs to this effort – recognition for businesses and recognition for organizations. It is anticipated that the standards and benchmarks for earning Wellness Star recognition will necessarily differ. The business Wellness Star Initiative will be launched first, with the organizational Wellness Star Initiative to follow in 2007. By providing visible, statewide recognition, awardees gain another marketable asset that will be useful in recruiting and retaining employees, an improved community perception of the business and, in some instances, an improved negotiating position relative to insurers.

Additionally, the Governor's Office of Health Policy and Finance will work with the Bureau of Insurance and the Dirigo Health Agency to develop recommendations regarding the creation of incentives for worksite wellness programs in the small group market. Specifically, this work will center on the feasibility and advisability of allowing modifications to existing community rating bands for those small groups that operate worksite wellness initiatives. In developing these recommendations, the state officials will consult with an advisory committee – to be named jointly by the Governor's Office of Health Policy and Finance and the Superintendent of the Bureau of Insurance. The committee will include consumer representatives, employers, and insurance carriers (as opposed to a representative of any trade group representing those carriers), representatives of the three regional Wellness Councils, and a representative of the Governor's Advisory Council on Health Systems Development. These recommendations will be presented to the Governor for his consideration in December 2006, prior to the first session of the 123rd Legislature.

How will this help make Maine the healthiest state?

Outside of our homes, we spend the most significant amount of our time at work – what a great opportunity to promote better health! What we need is a change in our culture that puts greater value into health promotion and prevention and our employers, where adults spend so much time, are perfectly situated to help create this shift. Adults will carry the new "view" home to their children; we will all become healthier, happier and more productive. We will be well on our way to becoming the healthiest state in the nation.

Tasks/Deadlines/Responsibilities

As noted above, development of the framework of the statewide wellness recognition project will be the responsibility of the Maine Quality Forum working with the Governor's Office of Health Policy and Finance. A framework will be developed in consultation with the regional Wellness Councils and will be subject to review by the MQF Advisory Council.

- Maine Quality Forum and the Governor's Office of Health Policy and Finance, in collaboration with representatives of the three regional Wellness Councils, will develop a program to broadly disseminate best practices in worksite wellness across Maine. This effort will build on existing, successful strategies currently in use in Maine. The framework for this strategy will be presented to the MQF Advisory Council for review and feedback – July 2006

- Development of "Wellness Star" standards and benchmarks for business recognition program by Maine Quality Forum staff with assistance from external experts. Final approval from the MQF Advisory Council and the Dirigo Health Agency Board – September 2006

- Validation Process Development for recognition program completed by the Maine Quality Forum staff with assistance from external experts and representatives of the three regional Wellness Councils – November 2006

- Wellness Star for Businesses Launched by Governor – September/October 2006

- The development of recommendations regarding potential modifications to insurance regulation that create incentives for worksite wellness programs will be the responsibility of

the Governor's Office of Health Policy and Finance and the Bureau of Insurance.

- GOHPF, in conjunction with the Superintendent or his designee, will name an Advisory Committee to assist in this effort – May 2006
- The Advisory Committee will hold an initial meeting to provide guidance regarding appropriate incentives for worksite wellness programs – no later than July 2006
- GOHPF, the Bureau of Insurance and the Dirigo Health Agency will work to develop draft recommendations regarding incentives, based upon initial input from the Advisory Committee. Draft recommendations will be presented to the Advisory Committee for review and discussion – October 2006
- Presentation of final recommendations to the Governor – December 2006

CHARTING A COURSE TO ADDRESS CHRONIC ILLNESS

There are two types of illness: acute and chronic. An acute illness is one which has a sudden onset and is short in duration. It usually goes away on its own and often responds to treatment. The flu is an example of an acute illness. In contrast, a chronic illness like asthma or diabetes is long lasting, sometimes spanning over the course of a lifetime. Often, these illnesses are manageable, but not curable. These conditions are typically attributable to more than one factor, including genetics, environment and personal behaviors.

Examples of common chronic illness are familiar to all of us. They include the heart disease, cancer, chronic obstructive lung disease (including asthma), diabetes, depression and addiction – the leading causes of death in Maine. Arthritis is a chronic illness, as is Alzheimer's disease, Parkinson's, and cerebrovascular disease, which causes stroke.

These conditions impact many individuals and families in Maine, degrading quality of life, impacting the productivity of our workforce and generating hundreds of millions of dollars in health care costs. In Maine almost 40% of the billions of dollars in increased in health care spending from 1998 - 2005 is attributable to the leading chronic illnesses: cardiovascular disease; cancer; chronic lung disease; and diabetes. As medicine gets better at diagnosing and treating these disease conditions, and we live longer and longer, these types of conditions will become more prevalent.[73]

Maine's experience with chronic illness can be summed up like this:

- In 2001, heart disease and cancer accounted for 51% of the deaths in Maine. Maine's death due to heart disease is lower than the national rate. Although the prevalence of heart disease is similar wherever you go in Maine, death due to heart disease is significantly lower in southern Maine than in other parts of the state.[74]

- Maine's cancer death rate is higher than the national rate and is the same across all regions of Maine.[75] However, the incidence of cancer is lower in southern Maine than it is in northeastern or central Maine. This is likely due, in part, because the population of central and northeastern Maine is "older" than that of southern Maine – and older age is highly correlated with cancer. It is also due to the relatively high rates of tobacco use that have existed for many years in the northern and central portions of the state, as compared to

southern Maine; many cancers – not just lung cancer – are triggered by tobacco use. The prevalence of coronary heart disease and related conditions such as high blood pressure and high cholesterol is similar in all areas of the state.

- Almost 10% of Maine adults report that they currently have asthma; this is significantly higher than the 7.7% reported by adults nationally.[76]

- Death due to stroke is highest in the northeastern reaches of Maine.[77] This may be attributable to the fact that the population in this region is older, has a higher rate of heart disease and is more likely to have multiple chronic conditions, making it more difficult for persons suffering a stroke to survive that event.

- While the prevalence of diabetes in Maine and across the nation is almost identical,[78] the percentage of Maine citizens with diabetes doubled between 1994 and 2002, with 7% of Mainers now having diabetes. Virtually all of the increase is in Type 2 diabetes and is largely due to greater prevalence of overweight[79] and inactivity and the aging of Maine's population. The prevalence of diabetes is about 58% higher in northeastern and central Maine than in southern Maine.

- According to a 2004 Maine Health Information Center study, 15% of MaineCare members had a diagnosis of depression and accounted for 36% ($315 million) of total claims payments.

At the same time:

- Maine's rates of overweight are slightly higher than that for the nation as a whole, although a smaller percentage of Mainers are obese.[80] Mainers living In the central region of the state face the greatest challenge with regard to obesity.[81]

- Based on the most recent Adult Tobacco survey performed by the Bureau of Health, 42% of adult MaineCare members smoke.

- Maine's rates of smoking and physical inactivity among adults are higher than the national rates. Nearly 24% of adults in Maine smoke, and nearly 26% have no leisure-time physical activity. Vigorous activity levels are highest in southern Maine and lowest in the northeastern region.[82]

- Maine's rates of binge drinking are particularly high for young

adults, with 45% reporting past month binging.[83] This not only puts them at risk for chronic alcohol problems, but leads to a high injury rate for this age group.

Unfortunately, many of the same problems that plague adults are also affecting the next generation of Mainers. The spring 2005 Maine Youth Risk Behavior study (YRBS) of 9th through 12th graders reveals that over 90% did not attend a physical education class on a daily basis, more than 10% are overweight and more than 37% do not participate in vigorous physical activity on a regular basis.[84]

Changing the health care system from one that serves predominantly acute illness to one better equipped to meet the needs of persons with chronic illness is like the difference between a road trip through Maine and an around the world voyage. For the former, a well running, well equipped car will get us there. For the latter, we'll need cars, planes and maybe boats, too! We'll need to navigate different languages and cultures and we will probably need help coordinating the trip.

Just as a car alone can't get you around the world, chronic illnesses are not well served by the delivery system's acute care orientation. Our health care system has grown up around the need to respond in a rapid, "quick strike" fashion to acute illness and injury – getting a quick and decisive diagnosis and initiating intervention. The providers play the dominant role in this equation, with a less important role for self-management (and determination) by the patient. This model made perfect sense in a world where infectious disease and acute episodes of illness were the major medical challenges. Acute illnesses are addressed primarily by physician and hospital care; chronic illnesses require a broader range of social and environmental supports (for example, assistance with home monitoring of conditions and community based exercise programs). Hospitals are often the most costly point of care – we need to build alternatives to serve our different health care needs.

Over time, we have witnessed huge progress in the battle against acute illness, allowing us to live longer; although it is clear that acute illnesses continue to be a matter of concern – witness the challenges that will be posed by Pandemic Influenza. As we have reined in the impact of acute illness, chronic conditions have become the leading cause of illness, death and disability, impacting about half of all Americans and most of the health care spending.[85] Patients with chronic illnesses like heart disease, lung disease, diabetes, cancer and mental illness live in the community; a health system that utilizes an acute model, silo-like framework – even managed and integrated care systems[86]– simply cannot efficiently or effectively meet the needs of those with chronic illness.

Even though chronic illness is a huge problem for us, we haven't developed very good systems or approaches to caring for persons with chronically illness in ways that ensure them the best quality of life possible. At the same time we need to ensure that the approach we adopt fosters quality, efficiency and cost effectiveness. In order to allow Maine to become the healthiest state, we need to improve those systems.

Improving the care of Maine citizens with chronic conditions will benefit the care consumer, the care provider, and our entire society. To make these improvements, the evidence strongly suggests the need for a new model of care, one where planned regular interactions between patients and their families and formal caregivers focus on maintaining a citizen's health. The "care model" – which was discussed in the Interim State Health Plan – is intended to satisfy all of these criteria.

A First Step – Changing How We Think About Chronic Care

Importantly, facing up to chronic illness will take a comprehensive and sustained effort. This isn't a problem that can be solved overnight. Not only do we have to develop a new vision of caring for people, we have to be certain to view our health care challenges through a lens that may feel somewhat different to all of us.

There are multiple aspects to approaching health. These include: prevention, early detection, and treatment/rehabilitation. Within each of these categories, there are interventions and actions that involve our entire community, from each of us as individuals and neighbors to local town officials, to employers and insurers, health care providers, and state policy makers.

The Governor's Advisory Council for Health Systems Development has developed a model that is very helpful in thinking about this approach. A visual representation of that model is included in Appendix Three.

When considering this new paradigm, it's important to understand that it may be easily applied to *any* class of health issues or conditions. If the condition you are most concerned about isn't included in the matrix in the Appendix, that doesn't mean we consider it unimportant. While we are using the model here to examine some of the state's leading chronic conditions, it can be just as easily applied to, for example, lyme disease, suicide, oral health or any other health issue you can think of. Each of the aspects of the model apply to all health issues – that's why it is so useful in thinking

through how we might tackle an issue.

Again, the framework provided by this alternative lens for viewing health care challenges is very helpful in conveying the importance and fundamental value of the role each of us as individuals, consumers, community members, employers, providers, insurers, and lawmakers, plays in Maine's health. It is easy to understand what steps we each can take to impact and improve health in our state, by breaking the issue down into strategies for prevention, early detection, and treatment/rehabilitation. The challenge doesn't seem quite so daunting when viewed through this lens.

And Another Step – Adapting our Systems to Meet the Needs of those with Chronic Illness

As called for in the Interim Plan, folks across Maine have been working to develop a variation of the care model for Maine and have been moving forward. MaineCare has recently issued a call for proposals for a new initiative designed to better meet the needs of members who are high cost – most of whom are chronically ill. This early step is part of the state's effort to reinforce the care model in Maine.

The work of *Quality Counts!* – a statewide collaborative of private clinicians and businesses – has continued over the past year. The fledgling group now has an organizational "home" and is planning a third annual meeting this coming December.

The Executive Committee of *Quality Counts!* has been involved in the development of the MaineCare initiative and the work of the Chronic Care Work Group, established in accordance with recommendations of the Interim Plan. This group comprises representatives from both within and without state government, focusing on developing strategies to disseminate the care model in Maine.

Where We Need to Head

Improving the care of Maine residents living with chronic conditions will benefit individuals, families, care providers, payers, business and our entire society. To improve outcomes for persons with chronic illnesses, the evidence strongly suggests the need for a new model of care, one where planned regular interactions between patients, their families and their caregivers focus on maintaining the patient's health. Everyone – the consumer, the provider, the payer, policymakers and communities – have a role in the care model.

Throughout the past several years various Maine stakeholders have undertaken a wide range of chronic disease prevention and improvement efforts. Examples include:

- Over 60 physician practices across the state have voluntarily participated in year- long structured "learning collaboratives" led by the Maine Network for Health and MaineHealth to make systemic improvements in care and outcomes for patients with diabetes, depression, chronic obstructive pulmonary disease, and asthma. A number of health centers have participated in national "learning collaboratives" sponsored by the Bureau of Primary Health Care to improve care for patients with diabetes, depression, and cardiovascular disease.
- More than 50 physician practice groups and provider networks have invested in nurse care management programs to provide clinical management and active coordination of health care services for patients in need of support;
- More than 150 Maine physician practices are using electronic medical records; still others are using some form of disease registry to track outcomes and provide better population-based care in the communities they serve;
- Many Maine hospitals participate in MECares, offering community-based care support programs for patients with heart failure and coronary heart disease, focusing on education and support for patients ready to change unhealthy behaviors that are known risk factors for the progression of their disease;
- MaineCare is partnering with providers and launching a new initiative to provide care management to its most costly members;
- Maine providers from across the state have joined together to form *Quality Counts!*, focused on prevention and improving the quality of care provided to persons living with chronic illness through peer education and support; and
- Governor Baldacci has endorsed the implementation of the "Care Model" as the principal strategy for strengthening chronic disease prevention and management.

All of these efforts are to be applauded and encouraged, but we need to do more. Specifically, it is recommended that the Governor's Office of Health Policy and Finance continue to work in collaboration with *Quality Counts!* and the Maine Quality Forum to advance the implementation of the Care Model throughout Maine. This work will include the development of the leadership team contemplated in the Interim Plan, that will develop and implement a communications plan to spread endorsement of the Care Model to important non-governmental organizations such as members of the business

community, community organizations (including non-health care related organizations such as Y's, Lions, Rotary Clubs), provider organizations and associations.

This group will also identify opportunities to support the dissemination of the Care Model, both as was done in the case of the MaineCare care model initiative and work in the area of developing policy that is supportive of the model.

Evidence-based Care

Experts in the field of chronic care management have identified characteristics of delivery systems that are associated with effective chronic care management. One such trait is the development and implementation of evidence-based practice guidelines and support for the use of such guidelines through provider education.[87]

Practice guidelines or clinical guidelines are meant to serve as roadmaps for providers treating patients with certain types of conditions. For instance, there are guidelines for the management of chronic heart failure, for the management of low back pain and for lipid control in patients with Type 2 diabetes. Sound guidelines are predicated on rigorous scientific evidence and represent the consensus opinion of experts in the relevant medical field.

The use of evidence based guidelines facilitates the care of the chronically ill patient. By ensuring that the preventive measures, and clinical interventions recommended by the guideline, the likelihood of optimizing the patient's outcomes will be improved. Of course, each patient is unique and his or her physician has to make the call on the best course of care for that individual. Still, an evidence-based guideline can be helpful in guiding a clinician through the maze of an increasingly complex knowledge base, to apply the current science most appropriately.

Designing practice systems that incorporate the use of evidence-based decision making is critical to improving the care we provide to the chronically ill patient. That is one of the aims of *Quality Counts!*, which should be supported and nurtured. The MaineCare care management project is also working to provide health care practices with the support needed to formulate working care process systems that capitalize on a practice's existing resources, complementing them with external supports as necessary, to ensure that patients receive the right care at the right time.

Information Technology and Effective Systems of Care
Another of the distinguishing characteristics of effective systems of chronic care is the use of information systems that support the development and use of disease registries, patient tracking systems and the like.[88]

A disease registry is a tool used by health care providers that capture and maintains a database of condition-specific information for patients that is used to support good care management. For example, a physician might choose to build a registry of information related to all of the patients in his or her practice who have diabetes. This registry might include contact information for each of the patients, along with information regarding the patient's last visit, latest lab values, referrals to and reports back from consulting specialists (like ophthalmologists), immunizations given and prescribed medications. If a new warning on a medication is released, the existence of a registry will allow the physician to quickly contact each patient in the practice who is on that medication, allowing for quick response to new research information. Similarly, the registry can be used to remind patients to come in for a pneumonia vaccine, for example, which is important in patients whose health status can be significantly compromised by such a major, but preventable illness.

The data in the registry can also be used by the physician to evaluate how well the practice is doing in caring for patients with diabetes. By examining how closely testing schedules adhere to best practices and how close lab values come to practice targets, the physician can assess if changes in practice systems are needed to improve the quality of care and its outcomes. Although registries and tracking systems don't have to be computerized, they are more powerful and far easier to use if they are.

It is also important for providers to be able to share clinical information in a timely manner, to allow for effective care coordination and to ensure that care provided to an individual patient is appropriate, safe and efficient. This is especially helpful in the case of chronically ill patients, who may be seeing a number of different health care providers, each of whom may be ordering imaging or lab tests, prescribing medications, or sending the patient for different therapies or consults. Each of the patient's care providers can do a better job if they have ready access to all of a patient's vital health care information.

The use of electronic medical records is an important piece of building the capacity across the health care system for the timely exchange of health care information. Many of our larger health care systems and practices are making headway in the adoption of this

type of technology. But we lack a secure mechanism to allow for the exchange of information *across* provider settings, especially those that might be part of different health systems.

The Maine Health Information Network Technology program aims to develop and implement an integrated, statewide system that will allow this type of data and information sharing. The creation of this type of system will have a significant impact on our ability to improve the quality of care and protect the safety of patients. This notion was endorsed in the Interim State Health Plan. Since that Plan was issued, considerable progress has been made toward making this type of "electronic interconnectivity" a reality in Maine.

A group of stakeholders representing the public sector, consumers, the medical community, insurers and data and technology experts have been working came together in 2004 to work on this issue. That group's efforts have culminated in the formation of a new non-profit organization that will house and be responsible for Maine Health Information Network Technology. The Board of the new organization will convene for the first time in January 2006, marking the transition from a conceptual phase of the project to development. The time line contemplated for the project envisions initial or pilot implementation of a network going live in 2007, with statewide implementation realized by 2010.

It is important that we continue to support this effort, through the contribution of time, energy and resources, as it represents Maine's most promising opportunity for taking an important leap forward in information technology and in the quality of care, particularly for our residents living with chronic illness.

How will this help make Maine the healthiest state?

Without doing a better job in caring for residents with chronic illness, our vision of becoming the healthiest state will not become a reality. Chronic conditions constitute perhaps our most significant health challenge and we simply do not do a very good job in managing them. This situation is not unique to Maine; this is a national "crisis," and one which many across the nation are working to address.

We need to be out in front on this issue and continue to support those working so hard to improve patient care and outcomes.

Tasks/Deadlines/Responsibilities

- MaineCare will implement its care management pilot program,

with an eye toward possible expansion of the program in out years – Spring 2006

- The Maine Quality Forum will continue to work with the MQF Advisory Council on support for the adoption of evidence-based practices by both providers and payers. The project described later in the Plan regarding improving the outcomes of care for heart attack patients is an example of one such effort – on-going

- The MHINT initiative will move from a planning phase and into development, perhaps via the establishment of a pilot program among a subset of providers – 2006

- MHINT will expand its implementation efforts, pushing toward statewide interconnectivity by 2010 – 2007

- The Governor's Office of Health Policy & Finance and the Maine Quality Forum will continue to support the growth of *Quality Counts!* as well as the efforts underway in our health centers and health systems, identifying opportunities for collaboration and cooperation – on-going

PRIMARY CARE AND THE EFFECTIVE INTEGRATION OF OTHER ASPECTS OF HEALTH CARE

Emphasis on prevention and early detection of disease highlights the important role of primary care. For many of us, our primary care provider may be the only regular contact we have with the health care system. As explained below, expanding our vision of primary care will enhance our ability to improve prevention and early detection and bring us closer to our goal of making Maine the healthiest state in the nation.

The Effective Integration of Mental Health and Primary Care

Mental health is inextricably intertwined with our physical health. The World Health Organization has found that psychiatric conditions account for half of the top ten leading causes of disability worldwide.[89] More than a quarter of all of Americans report having a mental health disorder during any 12-month period and half of all Americans will have some form of mental disorder at some point in their lifetime.[90] Yet for most people, mental health problems are unrecognized and untreated; the median delay between the onset of the problem and diagnosis and treatment is ten years.[91] This is an especially difficult situation for adolescents because untreated mental disorders at this stage of life predispose the affected individual to school failure, unstable employment, teenage childbearing and substance abuse.

This phenomenon is due in large measure to the stigma associated with mental illness, and a lack of understanding about the effectiveness of current mental health treatment. Other barriers include mental health workforce shortages, a lack of integration of mental health into our primary care delivery system, the historic isolation of mental health from major changes in the health care delivery system, reimbursement policy, an evidence base that is weaker than that which exists for general health care and a tendency to focus on major or severe mental illness as opposed to common ailments.

Depression is one of the most common mental health disorders, affecting up to 25% of Americans during their lifetimes. It is a condition that occurs across the lifespan, from adolescence to old age. In Maine, 15% of MaineCare members have a diagnosis of depression and 29% are receiving antidepressant medication.[92] One in eight women will experience a significant bout of depression after the delivery of a child, having a major impact – if left untreated – on

family life.[93] Depression can first appear in the young and for Maine girls, the prevalence of depression increases rapidly from 11% to 18% between ages 14 and 15.[94] Nationally, one-third of middle schools and half of all high schools list depression as one of the top three problems affecting their students.[95] At the other end of the life span, 40-54% of elderly Mainers in long term care settings have symptoms of depression or are receiving antidepressant medications.[96]

Depression has clearly been shown to impact people's ability to manage their medical problems. Older adults in rehabilitation have much poorer functional outcomes if they have depression in addition to their physical injury; effectively treating the depression of these older adults significantly improves their physical functioning. [97] [98] [99] Depression is known to increase the likelihood of developing coronary artery disease, stroke and diabetes. [100] [101] [102] [103] [104]

Moreover, the person with both depression and one of these chronic medical ailments has a much higher risk of death and disability than a person with the chronic ailment, but without depression. The evidence is strongest for depression and coronary artery disease. Persons with depression are 2 to 6 times more likely to die after having a heart attack or suffering heart failure, and also have a higher risk of non-fatal cardiac events.[105] [106] [107] [108] [109] Data on depression associated with stroke and diabetes show higher mortality, greater complications and functional impairment, as well as higher health care utilization and costs. [110] [111]

Multiple lines of research suggest that this association between depression and poor outcome from cardiovascular disease and diabetes is not only because of poor compliance with medical care, but because of physiologic changes associated with depression. [112] [113] [114] [115] [116] Given mounting scientific evidence on the importance of depression as a risk factor for cardiovascular disease, the National Heart, Lung and Blood Institute has issued a report concluding that better identification and treatment of depression in heart disease patients "could lead to improved medical, financial and psychosocial outcomes for a substantial segment of the U.S. population." [117]

Another reason to focus on depression is its association with suicide. Deaths and injuries from suicidal behavior are a substantial drain on Maine's health, economic and social resources. Since depression is one of the leading risk factors for suicide in all age groups, increased awareness and early identification and treatment of depression will greatly enhance our effort to reduce the impact of suicide in youth, adults and elders in Maine.

Finally, addressing depression, especially in persons with other

chronic medical conditions, should have a substantial impact on health care utilization and the use of high cost services such as hospitalization. Employers have long recognized the negative impact of depression on worker productivity and health care costs. In a 2003 MaineCare depression study, members with a depression diagnosis accounted for 15% of the members covered, but 36% of the total payments.[118] These payments were not only because of utilization of mental health treatments; 17.7% of the members with depression had a medical or surgical hospitalization, compared to 5.2% of the members without depression, even though the depressed members had approximately the same number of medical conditions.[119]

Several studies of high users of medical care in HMO's have shown that depressed patients had significantly higher numbers of office visits and hospital days than patients without depression, even though both depressed and non-depressed patients had the same prevalence of chronic medical conditions.[120] One HMO calculated that the cost for depressed persons was 1.4 times higher than for persons without depression, amounting to an additional $1498 per patient with only a small portion attributable to the cost of depression treatment.[121] Another study found that patients with both myocardial infarction and depression incurred total costs that were 41% higher than the costs for patients with myocardial infarction alone, primarily related to increased utilization of medical visits, emergency room services and hospital days, not to utilization of psychiatric services.[122] Preliminary data from a promising demonstration project in Colorado suggests that identifying and treating depression in Medicaid patients with chronic medical conditions results in decreasing medical costs, as compared to treatment of the medical conditions alone.[123]

Because of the high prevalence of depression and its close connection with other chronic conditions, the State Health Plan focuses addresses the challenge of successfully integrating mental health and health care by focusing initially on the identification and treatment of depression. Moreover, there is a good evidence base for depression treatment and relative agreement on quality standards for that care. Valid tools for screening and follow up for this condition are widely available, as are practice guidelines for the use of prescription medications for treatment. Once we have developed a program to integrate the treatment of depression into primary care, we will have made a crucial first step on the journey to a truly integrated mental and physical health care system.

Any system-wide transformation will require fiscal and human resources. We must accomplish any initiatives described in this Plan with the resources we currently have at hand. While our long range

goals may be a transformation of our entire health care system and the full integration of mental and physical health, our shorter term objectives have to be more modest, with strategic steps that are achievable within our means.

Which way from here?

We have mapped out several waypoints toward our destination of integrated health care. The first waypoint is a place where Mainers will recognize the signs and symptoms of depression, from childhood to older age, as well as they do the signs and symptoms of an ear infection, heart attack or stroke. Aiding our journey will be the implementation of early depression screening by primary care providers, in schools and in the workplace. And we will need to be certain that all Maine residents have timely access to quality, evidence-based care for depression.

The first steps

One of the first things we must do to increase awareness, educate people about depression and reduce the stigma associated with this condition. To accomplish this we must consistently monitor the prevalence of depression in both the general population as well as those seeking general medical care. Additionally, we need to screen and assess high risk populations including post-partum women, those with substance abuse, disability, chronic disease, and parents of at risk children. Finally, we will support integration of quality depression care within the traditional health care system.

Specifically, over the coming biennium the following steps will be taken:

Prevention

Unlike chronic diseases such as cancer or heart disease, we have relatively little national or Maine specific data on the epidemiology of depression. We need to expand and interconnect our existing epidemiological and other data sources to monitor the prevalence of depression across the lifespan. This will allow us to establish baseline data, identify risk factors, monitor the impact of interventions and determine populations with higher or lower risk.

It is essential to collect data on the relationship between depression and other chronic health conditions and on the total use of health care resources. There are existing sources of data including: the Behavioral Risk Factor Surveillance Survey, MaineCare data, data

from the Office of Substance Abuse and the Office of Elder Services' Minimum Data Set, all administered by the Maine Department of Health and Human Services, and the all payer/all claims database administered by the Maine Health Data Organization. Private businesses and insurers also have important information and data to contribute to this effort as well. This includes those employers participating in the Maine Health Management Coalition as well as Anthem Blue Cross and Blue Shield of Maine, Harvard Pilgrim, Aetna and Cigna and businesses that are self-insured. We call on these private sector interests to establish their own monitoring function and to share aggregate findings with the state, through the physician leaders within the Department of Health and Human Services who are focusing on this task.

The Commissioner of the Maine Department of Health and Human Services will convene a Mental Health/Public Health work group with representation from DHHS offices involved in mental health, substance abuse, elder services, public health, women's services, suicide prevention, school health and MaineCare. This work group will collaborate with other key stakeholders in the academic, public and private sector serving youth, adults and elders in the state. The Mental Health/Public Health Work group will develop a plan for collaborating on projects and integrating epidemiologic data on mental health issues across these multiple public and private data sources, beginning with the epidemiology of depression and its relationship to health outcomes, suicide, substance abuse and health care utilization.

The Mental Health/Public Health work group will also develop programming to increase public awareness of the signs and symptoms of depression across a person's lifespan as well as programming that promotes mental health and resiliency in our citizens and communities.

Future Maine projects in prevention will build upon these and other prevention and awareness activities already underway and will be coordinated with existing state and community public health, prevention, health education and education programs. Coordination with suicide prevention activities will be a priority. Prevention and mental health promotion activities need to be supported for persons across the lifespan, from school age children and adolescents to elders, as well as for communities and the workplace.

Early Detection

The Mental Health/Public Health workgroup discussed above will identify preferred screening instruments for depression, appropriate

to the different phases of lifespan, working toward the development and adoption of policy for promotion of the use of a universal screening tool across a range of non-mental health DHHS activities including substance abuse activities, public health activities, school health activities, elder services activities and so on.

Importantly, there already exists a robust body of literature on screening tools for depression that can be put to effective use in any of these settings. The crux of the issue is identifying strategies to ensure that the screening tool(s) are put into consistent use in primary care, educational and social service settings.

Until a universal tool is identified, MaineCare will continue to require age-appropriate screening for depression through its Bright Futures/Preventive Health Program.

Even without general acceptance of a universal screening tool, the Mental Health/Public Health workgroup will undertake planning to advance the following objectives:

- Increase the frequency of depression screening among MaineCare members with heart disease and other chronic conditions, beginning with those members participating in the MaineCare High Cost Users project.

- Increase the frequency of depression screening among adolescents.

- Increase the frequency of depression screening among post partum women.

- Ensure routine depression screening among elders applying for long term care services.

Treatment

The Maine Quality Forum will work with the Mental Health/Public Health work group to identify and adopt uniform standards for measuring the quality of care for depression. This collaborative group will work with commercial insurers to encourage the adoption of incentives for evidence-based quality depression care.

From national surveys we know that only a portion of people diagnosed with a mental illness receive any treatment at all, and that fewer than half of persons diagnosed receive what is considered appropriate care.[124] As an example, psychopharmacologic treatments are an important element of evidence-based depression

treatment. As with other chronic conditions, however, appropriate use of medication falls far short of optimal practice. Half of all depressed people starting an antidepressant medication discontinue that medication within 3 months, and 70% discontinue before 6 months, even though this type of medication typically takes at least 3 weeks to have any effect at all, and should generally be continued for at least 6 months. While the patient is often blamed for non-compliance, other factors also influence this phenomenon including prescribing practices, unacceptable side effects, drug interactions as well as a lack of adequate education, support, continuity of care and follow-up. Lack of access to health insurance, multiple prescription drug formularies for different insurers and economic factors also undoubtedly play a role.

Although Maine has excellent providers specializing in mental health care, many persons, especially the elderly and persons in rural areas prefer to see their primary care provider for the treatment of depression. Maine has currently a number of promising initiatives on integrating depression care into primary care, many of which involve the implementation of the Care Model. The State Health Plan, in its support of the application of the Care Model to chronic disease management, also endorses the application of the Care Model to the management of depression in primary care settings. While much work has been done by certain visionary organizations, integration of mental health and primary care is still in the early stages. Much work remains to expand these integration efforts across the state.

Objectives for improved treatment of depression will include:

- Extending the duration of medication treatment for depression among MaineCare members, beginning with those members participating in the MaineCare High Cost Users project;
- Promoting shared learning regarding the integration of depression into primary care among Maine's mental health, substance abuse and physical health providers.
- Developing a strategic plan for the promotion of effective integration of depression care into geriatric care settings.

A number of primary care providers around the state are already engaged in efforts to implement the Care Model for the identification and treatment of depression in primary care. The MaineHealth Depression/Primary Care Collaborative is convening a number of these organizations along with DHHS, to promote shared learning, discuss barriers and identify performance and outcomes measures.

The Maine Health Access Foundation is launching a multi-year initiative focused on the issue of effective integration of Maine's mental health, substance abuse and physical health providers. A

short term objective of this effort is the production of an inventory of existing integrated care projects and examples of the use of the Care Model to understand the level of readiness that exists in Maine for use of these approaches, and the potential usefulness of other models for the integrated care of mental illness an substance abuse.

Primary Care and Substance Abuse

Addressing depression is only a first step toward improving behavioral health outcomes within Maine's health care system. As structures, policies and processes for addressing depression are implemented in health care systems, this same infrastructure will be used to integrate activities related to prevention, screening and treatment for substance abuse. As an example, as progress is made towards the implementation of universal screening and treatment for depression in post partum women, it becomes relatively easy to use the same infrastructure and prepared workforce to assess alcohol use in pregnant women, which should have a significant impact on reducing the prevalence of fetal alcohol syndrome.

Many of the tasks described for addressing depression and the integration of mental health into primary care lend themselves to the inclusion of activities related to substance abuse. The Mental Health/Public Health Work Group must expand its activities to include integration of substance abuse issues. These include the work related to suicide prevention should include technical assistance for providers regarding alcohol and substance abuse as well as depression, as risk factors for suicide across the lifespan. Similarly, efforts related to the integration of behavioral health and primary care particularly for women of childbearing age must include the identification of screening tools for problem drinking that are appropriate for use in primary care. These efforts are also amenable to inclusion of educational activities related to pain management, including best practices related to prescribing pain medications.

As noted earlier, the Maine Health Access Foundation is sponsoring a multi-year initiative aimed at supporting the effective integration of Maine's mental health, substance abuse and physical health providers. This effort involves working with primary care organizations to develop new paradigms for early identification and interventions for both mental illness and substance abuse appropriate to primary care settings.

The Co-Occurring Disorders Grant ("Co-SIG") administered jointly by DHHS' Adult Mental Health Services and Office of Substance Abuse has as a focus the cross-training of substance abuse providers to do screening and early identification of mental health issues and,

similarly, of other providers to identify substance abuse disorders among persons with mental illness. The project will also provide an opportunity to develop educational materials regarding potentially adverse interactions between alcohol and the drugs commonly prescribed in mental health settings.

In the second year of the Co-SIG, a primary care demonstration site will be added, to advance screening and treatment for both depression and substance abuse in primary care. This will be an opportunity to promote best practices regarding the prescribing of pain medications and benzodiazepines, as well as antidepressant medication, among health care providers who are, in general, the major prescribers of these medications.

As plans are developed for improving identification and intervention for depression and other behavioral disorders in elders assessed for long term care, assessment of substance use will also be addressed. It will also be important to identify best practices for appropriate medication use in elders, for benzodiazepines and other psychotropic drugs, which can have a profound adverse impact on mental status and on safety from physical injury.

Primary Care and Oral Health

Oral health is an integral part of physical health. While the science is still evolving, early research points to an association between oral infections and specific conditions such as diabetes, cardiovascular disease and certain adverse outcomes of pregnancy,[125] there is no doubt that oral health is related to our ability to eat healthfully. It affects how we look and our self-esteem. It impacts our ability to communicate, our economic productivity and our ability to function at home, work and school.[126]

The Maine Center for Disease Control and Prevention is currently engaged in the development of a new oral health plan for Maine. That plan, which is being formulated in an open process involving a very broad range of stakeholders, will include an action agenda for emphasizing cost-effective prevention in oral health. Part of this agenda is likely to be a call for maximizing our resources and access to care by integrating oral health care with well baby, well child and well adult care.

The new oral health plan is expected to be released in 2006. The Governor's Office of Health Policy and Finance along with the Governor's Advisory Council on Health Systems Development will review the report at that time and will decide then, if it should be incorporated by reference into the State Health Plan.

How will this help make Maine the healthiest state?
Mainers need to enjoy both good physical and mental health to be truly healthy. By taking these important first steps toward ensuring the integration of other aspects of health care into physical health, we are recognizing the importance of all of these aspects of health and beginning to make the fundamental changes to our delivery system needed to pay adequate attention to these issues.

Tasks/Deadlines/Responsibilities

- The Maine Center for Disease Control and Prevention will produce and report on an analysis of Maine hospital discharge data for the co-occurrence of diabetes and depression and the differential impact of depression on the outcomes of diabetic care – June 2006

- The Maine Quality Forum will ensure that its activities related to the dissemination of electronic medical records technology are designed to incorporate mental health services settings – June 2006

- The Office of MaineCare Services will perform analyses of existing data sets to further assess the impact of depression on the utilization and health outcomes of MaineCare members, with special attention paid to that subpopulation of members having serious mental illness – on-going

- The Mental Health/Public Health Work Group will support the Maine Youth Suicide Prevention Program and the Office of Elder Services in their on-going work in suicide prevention. This will include technical assistance in developing educational materials about depression for public distribution, for use in school health education, for the training of community "gatekeepers" and for use in training of direct service providers in long tern care settings. Both youth and elder serving organizations, including education, community, primary care and long term care facilities, will be engaged in activities that promote awareness, early screening and referral for treatment of depression as part of on-going activities in suicide prevention. Additionally, the Mental Health/Public Health Work Group will include representation from the Maine Office of Substance Abuse so as to ensure information regarding screening and interventions for substance abuse are included in technical assistance provided to programs for youth and for elders in suicide prevention – on-going

- MaineCare members enrolled in the MaineCare High Cost

Member program who have a chronic medical condition will be screened for depression. This screening will be part of the routine approach to care for these patients, whether it is carried out by the primary care provider responsible for the member or MaineCare's vendor who will be administering the program Spring 2006 and on-going

- The Maine Center for Disease Control and Prevention will work to increase routine depression screening for adolescents seen in school based health centers, accomplished using mental health funds from the Center, with on-going technical assistance and training on screening in adolescents provided by the Maine CDC and DHHS child and adult mental health staff.. Maine CDC grants to school based centers will include a performance measure for depression screening – July 2006

- School based health centers receiving funding from the Maine CDC will report on the numbers of students screened for depression, depression diagnoses and the numbers of students treated for depression – beginning in State Fiscal Year 2007

- Maine DHHS will develop policies for depression screening in post partum women served by DHHS programs, such as WIC programs and the Maine CDC home visiting program for first-time mothers, but health care providers will also be encouraged to adopt universal screening within obstetric, primary care and pediatric practices. Working with MaineHealth, the Maine CDC Women's Health Program and the Maine Primary Care Association collaboratives on integrating mental health and primary care, the Mental Health/Public Health workgroup will collect data on the number of women screened for depression in the post partum period and support expansion of such screening – beginning June 2006 and on-going

- The DHHS Office of Elder Services and Adult Mental Health will develop policies and procedures for tracking those elders who screen positive for depression, increasing provider awareness of the signs and symptoms of depression and educating providers about evidence-based practices for the treatment of depression in elders – June 2006 and on-going

- Among MaineCare's highest cost members participating in that program's care management pilot program (described in the chronic care section of this Plan), a concerted effort will be made to improve the rate of medication compliance among those members with depression, reducing the rate of medication discontinuance at both 3 and 6 months by 50% - June 2007

- MaineHealth Depression/Primary Care Collaborative will convene a working group comprising DHHS and organizations engaged in the implementation of integrated depression and primary care to promote shared learning, discuss barriers and identify performance and outcome measures. This group will meet quarterly over the course of eighteen months and will conclude with a statewide conference in the fall of 2007 – beginning April 2007

- The Maine CDC Women's Health Program and the Maine Primary Care Association will report on the outcomes of the project on integrating behavioral health and primary care for women of childbearing age, which is being implemented at four Federally Qualified Health Centers in Maine. This effort will also identify appropriate screening tools for use with women of child-bearing age in primary care, to discover problem drinking. Further, the project will include educational activities related to pain management, including best practices related to prescribing pain medication – October 2007

- The Maine Health Access Foundation integrated mental illness/substance abuse/primary care initiative to conduct an inventory of existing integrated care projects and Care Model and report out findings – July 2006

- The Maine Health Access Foundation will assemble a group of key statewide stakeholders to develop a consensus vision for integrated mental health/primary care, to articulate goals, objectives and strategies for integration and to analyze barriers to integration – December 2006

- The Co-Occurring Disorders Grant (Co-SIG) shared by Adult Mental Health Services and the Office of Substance Abuse will provide training to advance the early identification of mental health issues by substance abuse providers and identification of substance use disorders among persons with mental illness. The project will also develop educational materials regarding potentially adverse interactions between alcohol and the drugs commonly prescribed in mental health settings – on-going

- The Co-SIG project will add a primary care demonstration site, to advance screening and treatment for both depression and substance abuse in primary care - 2007

GETTING EVERYONE ON BOARD – ACCESS TO

AFFORDABLE COVERAGE

Preventing disease and promoting health are critically important long term strategies, but they will not eliminate illness and disability. The single most dire diagnosis challenging Maine remains lack of insurance. The uninsured are sicker and die sooner.[127] Access to health care for all Mainers remains an essential goal of Dirigo Health and Maine's State Health Plan.

The ultimate destination on the health care access highway is affordable, quality health care for every Mainer. But access is directly related to affordability -- the health care cost crisis here and across the nation complicates Dirigo's goal of universal coverage.

First, it is important to note that there are many facets of access. Although the term is very often taken to mean health coverage, it is certainly more than simply an insurance card. More broadly, access can be characterized as the "fit" between the character and expectations of providers and consumers.[128] Originally described by Donabedian, this level of fit can be viewed as having five aspects: affordability, availability, accessibility, acceptability and accommodation. Using Donabedian's definition of access includes the consideration of racial and ethnic disparities in accessing appropriate care.[129]

While the notion of affordability is obvious, perhaps the others are not. Availability reflects the extent to which needed resources exist to meet the needs of the community; this includes preventive, early detection, treatment, and rehabilitative resources. Accessibility implies geographic distribution of resources and the ease with which a resource may be physically accessed – this can be especially important to Mainers living with disabilities. Acceptability is the degree to which the resources available complement the cultural values and expectations of the population; this would include, for example, the manner in which services are delivered to minority populations having markedly different cultural orientations than most Mainers (e.g. the Somali immigrant population). Accommodation refers to organization of resources and the extent to which they meet the constraints faced by consumers, for example, the hours services are available. Finally, access also means access to appropriate information to assist not only in health care decision making but in building healthier lifestyles and a healthier environment.

In sum, we must broaden our view of access and what it takes and means to be healthy, if we are to achieve our goal of becoming the healthiest state in America. This section of the Plan addresses that

aspect of access that relates the affordable health insurance coverage.

As we noted in the Interim State Health Plan, when the cost of care increases, insurance premiums also rise. Increases in insurance premiums put a strain on businesses, which eventually pass on some of the cost to their employees, in the form of increased premiums paid by the employee. Some businesses attempt to stem the rate of increase in premiums by requiring increased cost-sharing – in the form of higher deductibles and/or higher co-payments – by employees.[130] The following measures reflect the impact this phenomenon has had on Maine families in recent years:

- Thirty-eight percent of Maine's insured population pays more than 5 percent of their total household income toward health insurance premiums. One in twenty pays more than 20 percent. People who have to buy non-group coverage pay over $4,000 a year for coverage.[131]
- The median deductible in Maine in 2002 was over $4,000.[132]
- Because of rising premiums and out-of-pocket requirements, on average Americans spent 18.2% of their income in 2001 on medical care, more than they spent on food, housing, and transportation.[133] Maine families likely spent a higher share of their income on health care, since health care expenditures per person in Maine are higher and income is lower than the national average.

As families become increasingly unable to afford these cost increases, some families lose insurance altogether, and many simply put off accessing care. The proportion of Maine's population that is uninsured has fallen since the inception of the Dirigo reforms; still, 12% of our residents remain without coverage.[134] 80% of the uninsured work -- of those who do work 73% work in small businesses or are self-employed. 52% of the uninsured are below 200% FPL or $30,500/year, for a family of three.[135]

Lack of insurance and access to timely, adequate care impacts both the lives of those without access as well as the health system as a whole:

- The uninsured tend to be more costly to the health care system because they are less likely than the insured to receive preventive care, are diagnosed at more advanced disease stages, and are more likely than the insured to be hospitalized for preventable conditions like pneumonia and uncontrolled diabetes.
- Death rates for uninsured women with breast cancer are significantly higher than for insured women.[136] Health insurance

would reduce mortality rates for the uninsured and could improve their annual earnings by 10-30%.[137]

- In Maine, over 11 percent of the population reports not visiting a physician because of cost.[138] Forty-two percent of families with uninsured children report delaying needed care for their children due to costs. This rate is seven times that seen in insured families.[139]
- In 2003 Maine's hospitals reported $108 million in bad debt and $42 million in charity care costs caring for the uninsured.[140] These costs are then passed on to insurance companies, who in turn raise premiums for businesses and individuals causing the ranks of the uninsured to continue to grow.

The DirigoChoice plan is making important progress, enrolling 8,600 Mainers and over 750 small businesses already with its comprehensive, affordable coverage. A waiting list of 3,000 individuals is being addressed, as the program reopens to individuals and sole proprietors January 2006. DirigoChoice has spurred re-invigorated competition from other insurers in the small group market. And, Dirigo's initiative to expand access to parents with incomes between 150% and 200% of the federal poverty level through MaineCare has already increased coverage to nearly 4,000 people.

Dirigo exists in a costly marketplace. Original projections for the DirigoChoice product were made using 2002 data; premium costs have grown significantly since then, although they dropped markedly in Dirigo's first year of operation:

Year	Avg. small group premium increase
2003[141]	16%
2004[142]	6%
2005[143]	13%
2006[144]	5%

Assumptions about how much employers could pay and about what insurance companies would charge had to be re-visited and expenditures increased to address concerns raised by insurers about the potential risk -- and associated costs -- of serving an uninsured population. Plans for expanding MaineCare's waiver that provided coverage for Maine's childless adults below 125% of the federal poverty level were stalled when the program reached budget limits set by the Federal government.

Importantly, a changing Maine economy and health care marketplace brought in an unexpectedly high number of low wage workers eligible for the program's deepest discounts and revealed

the growing problem of under-insurance in our State. A recent study by the Muskie School at USM found that among DirigoChoice enrollees who switched from other coverage, 40 percent were switching from policies that had deductibles in excess of $2,500.[145] High deductibles were disproportionately concentrated in the lowest income families for whom out-of-pocket costs can represent a severe hardship. For example, among DirigoChoice enrollees with family incomes less than $23,500 (about 40 percent of enrollees) a $2500 deductible is more than 10 percent of household income. The survey confirmed that those who had been paying high deductibles were more likely to report doing without health care during an illness due to costs. The growth of the under-insured in Maine likely explains the fact that nearly 1/3rd of bad debt being provided by Maine's hospitals is incurred by persons with health insurance.

Some continue to support the establishment of high risk pools as a means to increase access. But such pools operate only in the individual market and have no impact on the small and large groups where the majority of Mainers are insured. Importantly, DirigoChoice shores up employer-sponsored coverage and provides individuals an opportunity to purchase a lower cost, higher value group health plan and provides subsidies to help make it affordable.

Importantly, DirigoChoice is not the only strategy to reach universal access to coverage. Dirigo Health Reform includes three broad strategies to move Maine to this goal: system reforms to make coverage more affordable to employers, employees and individuals; DirigoChoice; and a strong MaineCare program.

In an effort to ensure DirigoChoice best serves the broadest range of Maine residents as possible, the Dirigo Health Agency will be developing a lower cost alternative product. This work will be conducted during the first several months of 2006. The introduction of this type of alternative is intended to better meet the needs of those who prefer and even lower cost product.

MaineCare remains the safety net access program for thousands of Mainers who either lack the resources to pay for needed care themselves or who have serious disabilities or illnesses. The program provides coverage for physical and mental health services and long term care, as well as a broad array of services for disabled persons. MaineCare helps private insurance work by acting as a sort of *de facto* high risk pool, providing coverage for high cost, high risk individuals, who are otherwise uninsurable – which is why cost per member is higher for MaineCare members than it is for privately insured individuals.

In Maine, a relatively high proportion of our non-elderly population is

covered by our Medicaid program; enrollment here is 8 percentage points higher than the national average. The proportion of our population covered by an employer-sponsored plan is about the same as the national average. At the same time, the proportion of Maine residents who are uninsured is 6 percentage points *lower* than the national average – we are tied with 7 other states for the lowest rate of uninsurance in the country.[146] This scenario highlights the success we've had in impacting the rate of uninsured by building on our MaineCare program. Expanding access to coverage is critical to health of our residents and to the economic health of our state.

MaineCare is funded jointly by the federal and state governments; the state receives roughly $2 in matching payments from the federal government for every $1 in state funds spent under the program. In turn, the program has to meet federal guidelines and requirements for the program. The costs of the program are dependent, in part, on the rate of health care inflation and on the number of people served, but overall expenditures of the program are limited by a legislatively-approved budget. This requires the policy makers to make very difficult choices about who will be eligible for MaineCare coverage, what benefits will be covered and what rates will be paid to the providers serving program members.

In the recent past, eligibility and benefit packages for certain aspects of the program have been trimmed to keep the program in compliance with federal limits[147] and certain types of providers are now subject to taxes that are used to help supplement the General Fund. By the same token, there have been modest eligibility expansions in other areas.[148] Further, considerable investment has been made in this biennium to correct what was more than a decade-long backlog of hospital settlements; this more than $96 million pay out is representative of the Administration's and Legislature's desire to ensure that MaineCare is doing its best to meet its financial obligations.

The Administration and the Legislature continues to work diligently to maintain the integrity of this critical program. A Blue Ribbon Commission on the future of MaineCare has recently completed its deliberations and will soon publish its recommendations for program improvements. An early draft of the report, however, does not indicate a call for any profound changes in the program. The federal government is also considering the future of Medicaid; the Medicaid Advisory Commission is due to report out its recommendations for the reform and modernization of Medicaid in late 2006.

The most recent federal deficit reduction bill includes a range of changes to the Medicaid program. This bill sets out a number of new limitations, requirements and options which states – including Maine

– will have to live by if they want to continue to receive federal assistance for their Medicaid programs.

Similarly, the President's proposed budget for 2007 contains provisions that would have significant impact on Medicaid, on programs that help us assure the presence of related safety net services, especially in our rural communities, and on many of the programs and services administered by our public health system. If adopted, these proposals will critically affect Maine's ability to maintain a viable safety net. We will be working over the course of the next several months to ensure the future of that safety net.

Over the past year, the MaineCare program has been the subject of a good deal of scrutiny. The implementation of the program's new claims system – MECMS – has been difficult and fraught with frustration on the part of the provider community, the Department, the Governor and the Legislature. The issues associated with the MECMS implementation has served to complicate the relationship between the program and the provider community. Clearly, the top concern of health care providers is the health of their patients, but the recent administrative challenges have led many to rethink their participation in the program.

This is of grave concern to the Department, which has placed the MECMS issue at the top of its work agenda. Resources have been marshaled to meet this challenge; efforts to correct the problems are on track and remain a work in progress. This is not to say that all issues have been resolved or that the concerns of the provider community have been put to rest, but the public may be assured that everything possible is being done to ensure that administration of the program has regained stable footing in the near future.

Despite the administrative challenges, the program remains vital for the health and well being of more than a quarter of all Mainers. Without the program, people in need of care would end up delaying services until their condition worsened to an acute stage. At that point, they often must be treated in more expensive sites (inpatient hospital care or the emergency room, rather than in a routine outpatient setting), with more expensive care and poorer chances for a good outcome. If they had no coverage, the cost of this care would be shifted to patients who do pay their bills, pushing up their charges. By providing this safety net coverage, we can ensure that people have access to necessary care when they need it, while providing a revenue stream to those who provide that care and helping minimize the upward pressure on charges – and premiums – for other Mainers. This is why we must continue to fight to maintain the integrity of this program.

The road to universal coverage converges with the road for cost containment -- it's a long uphill drive but Dirigo Health continues to make progress. For that progress to continue, the State Health Plan calls for specific actions:

Tasks/Deadlines/Responsibilities

- The Governor's Office of Health Policy and Finance and the Dirigo Health Agency will participate with The Commonwealth Fund in its initiative to conduct an independent evaluation of progress to date in Dirigo Health, to identify key successes and areas requiring improvement – Spring 2006 and on-going

- The Dirigo Health Agency will develop and implement a lower cost alternative product and a comprehensive marketing and outreach plan to reach more uninsured and expand DirigoChoice uninsured enrollment by at least 100% -- product development, Spring 2006; enrollment increases by 2007

- The Maine Department of Health and Human Services will complete the redesign of the MaineCare waiver for childless adults to ensure compliance with federal spending limits and with an eye toward re-opening the program to childless adults – on-going

- The Governor's Office of Health Policy and Finance will work collaboratively with stakeholders to assess the potential impact of the 2007 federal budget on Maine's safety net programs as the budget bill works its way through Congress – on-going

- The Governor's Office of Health Policy and Finance and the Maine Bureau of Insurance will work collaboratively to review the effectiveness of Dirigo Health Reform's requirement for 78% loss ratio in small group market in making coverage more affordable in that market, as well as insurance regulation and its impact on premium costs – March 2006

- The Governor's Office of Health Policy and Finance will establish the Health Policy Leadership Forum, representing business, insurers, providers, consumers, and government, to assure ongoing communication and strategy to access affordable coverage – April 2006

- The Dirigo Health Agency and Maine Bureau of Insurance will

analyze the effectiveness of the DirigoChoice High Risk Pool – October 2007

- With funding and support from The Robert Wood Johnson Foundation's State Coverage Initiatives, and in collaboration with the Muskie School of Public Service, the Health Policy Leadership Forum, and others, the Governor's Office of Health Policy and Finance will conduct three public educational sessions to explore issues identified by the Forum related to health care coverage – April 2006, September 2006 and February 2007

QUALITY OF CARE

The quality of health care is of paramount importance. If care is of poor quality, patient outcomes will be poor, we will have misspent our health care resources and our communities and economy will suffer. The Institute of Medicine defines "high quality care" as care that is:

- **Safe** - avoiding injuries to patients from the care that is intended to help them
- **Effective** - providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit (avoiding under use and overuse, respectively)
- **Patient-centered** – providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions
- **Timely** – reducing waits and sometimes harmful delays for both those who receive and those who give care
- **Efficient** – avoiding waste, including waste of equipment, supplies, ideas, and energy; and
- **Equitable** – providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status.

The Maine Quality Forum was created as part of Dirigo Health reform. Its mission is to advocate for high quality health care and help each Maine citizen make informed health care choices. To achieve its mission, the Forum serves as a clearinghouse of best practices and information to improve health, and acts as an informational resource for health care providers and consumers. Efforts undertaken by the Maine Quality Forum include sharing best medical practices with providers and consumers, as well as wellness, health promotion and disease prevention initiatives. Additionally, the Forum – supported by a broad based advisory committee - creates quality standards and assesses needs for new medical technologies throughout the state.

Educating and Encouraging Adoption of Best Practices in Health Care

A "best practice" in health care delivery is the consensus opinion of what should be done in a specific clinical situation. The National Quality Forum, a public-private collaborative comprising consumers, payers, employers, health care professionals, health systems,

accrediting bodies, unions and researchers, works to promote the development and use of common approaches to measuring quality and fostering capacity for quality improvement. The Maine Quality Forum and the Maine Quality Forum Advisory Council have worked to promote awareness of the National Quality Forum (NQF) 30 best safe practices among Maine providers and consumers through the development of the *Safety Star* recognition program. This program will identify hospitals that lead the way in patient safety, using the NQF safe practices as a basis for certification. The program was launched in September 2005, with the first award anticipated in January 2006.

The Maine Quality Forum has begun to collect clinical information from providers measuring their compliance with best practices in the care of heart attack, heart failure, pneumonia, and surgical infection reduction. These data will be analyzed and made available to the public in early summer 2006.

The Maine Quality Forum is also collecting data about nursing resources, hours and skill levels as well as other nurse-sensitive indicators, to establish best practices in nursing care for the state of Maine.

Using its website and distribution of print materials, newspaper advertisements and outreach to and collaboration with groups in the workplace, the Maine Quality Forum continues to promote public understanding of the concept of best practice and to raise expectations of provider performance.

Variations in Medical Care

Marked variation in the use of medical care for the same clinical problem from one geographic area to the next is a hallmark of the current state of health care. Where patients live frequently determines whether or not they will be hospitalized or have surgery for conditions that can be treated in different ways.

Variation in the frequency with which surgery is chosen as the route for care is driven by surgeon preference, custom and training. The Maine Quality Forum has publicized extreme variations in the state in rates of lumbar fusion, carotid endarterectomy and hysterectomy for non-cancerous conditions of the uterus, and has provided "feedback" information to those communities that have shown an interest in reducing their apparent over-use of these modes of care.

Variation in the use of inpatient care and the use of specialty medical services is related to the supply of those services. When there is

more capacity in the system to provide the care, more care is provided, even if there is no evidence that there is an underlying need for such care. Further, there is evidence that more is not better when the utilization of services falls significantly outside average rates.[149]

Improving the Care of Patients with Acute Myocardial Infarction

The leading cause of death in Maine and the United States is acute myocardial infarction (heart attack or AMI). Over the long term, there is a lot we can do to reduce the incidence of heart attack in Maine, by adopting healthier lifestyles and by promoting prevention and early detection activities, as discussed elsewhere in this Plan. More immediately, we can work to reduce death rates from heart attack, by ensuring patients receive the most appropriate treatment in a timely manner. The care of patients with acute myocardial infarction has been improved by technologies associated with improvement in outcomes by saving heart muscle from damage caused by lack of blood flow.

Myocardial infarction occurs when the heart muscle can not get enough oxygen because of blockage of a blood vessel to the heart muscle known as the coronary artery. The blockage usually happens when the fatty deposits combine with a blood clot to clog the artery. When a vessel is suddenly blocked, oxygen can't get through and the heart muscle will die. If the plugged vessel can be reopened in, then damage to the heart muscle can be minimized. Time is critical in this situation – the risk of permanent damage to the heart and the risk of death from heart attack, is related to the immediate identification of symptoms by patients and providers. It is also related how quickly the blocked artery is unclogged– sometimes referred to as "reperfusion." Research has shown that reperfusion is very helpful in saving heart muscle is it is used within 90 minutes of the start of symptoms of heart attack. The sooner the treatment is given, the more heart muscle is salvaged.

There are three types of blockage clearing therapy used in heart attack patients: drugs that dissolve clots (thrombolytic therapy); breaking up the clot with a tube or catheter ("PCI" or primary angioplasty or stenting of blocked arteries); and open heart surgery (coronary bypass surgery). Since open heart surgery takes too long, the decision around which type of blockage clearing treatment to use in an emergency situation really boils down to a choice between clot dissolving drugs and catheter blockage clearing.

There are advantages and disadvantages to each of these two types

of heart attack treatment, but in general, catheter blockage clearing is preferred *if* it can be delivered quickly enough. If catheter blockage clearing can not be done quickly enough, then clot dissolving drugs should be used.

The current standards of care for heart attack require that clot dissolving drugs in heart attack patients be given within 30 minutes of arrival at a medical facility (this is referred to as "door-to-needle" time) or that the blocked artery be opened within 90 minutes by catheter ("door-to- balloon" time). If the catheter treatment will take more than an hour longer than giving that patient thrombolytic drugs, the drug or thrombolytic treatment is preferred.

In Maine, all emergency rooms offer clot dissolving drugs, but catheter blockage clearing is available only in a few hospitals. This means that the decision about which heart attack treatment to use is often determined by the distance and time to a heart center that can use catheter blockage clearing (PCI).

Importantly, this is not to say that every hospital in Maine should have the ability to perform angioplasties (PCIs). Professionals do not agree on the issue of what type of staffing and facilities a hospital should have to safely perform angioplasty, either on an emergency basis or an elective basis. Experts agree that complicated procedures like PCI should be done by centers that perform a certain minimum number of procedures to stay "sharp." Also, there is some evidence to suggest that patients are better off receiving angioplasty in a facility that is able to perform heart surgery to immediately deal with the infrequent complications of PCI. A high quality heart surgery program with good patient outcomes requires experienced medical staff – doctors, nurses and technicians – who perform enough procedures each year to ensure their skills remain sharp, as well as very sophisticated equipment and facilities. These resources are extremely costly to maintain, as noted above, need to maintain at least a minimum patient volume in order to provide good care. While we might find it convenient and even preferable to receive this type of care close to home, we need to be careful not to mistake convenience and preference for need. Maine's population simply cannot support multiple heart surgery programs. Instead, we have to ensure that patients receive care in accordance with best practice, taking into consideration the realities we face in terms of geography, resource constraints and quality concerns.

There is a role for catheter blockage clearing in most patients with heart attack, even including many of those who receive successful thrombolytic therapy, since primary PCI can reduce the rate of repeat heart attack– and therefore death – in the clot busting drug treated patients. Therefore, a medical evaluation and possible PCI

after thrombolytic therapy may occur very early or sometime later. Either way, a coordinated effort involving patients themselves (educated in the symptoms of heart attack and the importance of immediately seeking care), emergency medical personnel, emergency room staff, primary care physicians and cardiologists is critical to making sure that heart attack patients receive timely blockage clearing and appropriate follow-up care.

Addressing the Challenge

In working to ensure that patients with AMI get the right care at the right time, we need to examine the process of getting that patient to care and the delivery of care once the patient is in the hands of medical professionals. In this case, the most critical variables to consider is the elapsed time between the onset of symptoms to the first call to 9-1-1 and then to the administration of reperfusion treatment (either clot busting drugs or primary angioplasty). The shorter the elapsed times, the more successful the entire treatment process will be.

This framework lends itself to the sort of regional and collaborative approach to care on which Maine's trauma care system is modeled. Several groups around the state are presently working to improve the AMI care process on a local level. Looking at this process from a *statewide* perspective could be useful in ensuring that we have a coordinated, statewide approach to this care process.

The Maine Quality Forum serves as a resource and convener for statewide efforts like the development of a plan for the care of AMI patients across Maine, agreed to and supported by all of the relevant stakeholders, ensuring that this best process of care is made available to the largest number of Maine residents possible. This undertaking is not intended to trump local efforts to define processes of care. Instead, it is meant to develop a cohesive and coordinated Maine-wide approach to the care of AMI patients with the goal of ensuring the best possible outcome for those patients.

With this goal in mind, the Maine Quality Forum will launch a new initiative designed to define a widely accepted and endorsed process of care for heart attack. The objectives of this effort will be as follows and will serve as benchmarks for the project's success:

- All AMI patients presenting to Maine hospitals are treated according to a consensus treatment "map" that takes into account the best medical practices and the realities of time and distance in Maine. By July 2007, all AMI patients will receive the appropriate treatment – either

thrombolytic drugs or primary PCI – within the best practice time lines.
  - Thrombolytic drugs are given within thirty (30) minutes of arrival at all Maine acute care hospitals in appropriate patients.
  - Patient with AMI who are appropriate for PCI will receive their treatment within ninety (90) minutes of arrival at the treating hospital.
  - To ensure that the process developed via this project remains relevant, incentives must be developed that promote the above objectives such as:
    - Employ an open process of creating the treatment map that allows changes as the science changes;
    - Identify and advocate for payment methodology that rewards support of the treatment map and success in meeting process and outcome goals; and/or
    - Identification and advocacy for a medical liability safe harbor for providers who comply with the treatment map.

Tasks/Deadlines/Responsibilities

The Maine Quality Forum, in conjunction with the MQF Advisory Council, will convene a statewide group comprising representatives of the continuum of care of patients with acute MI, from emergency response to hospital discharge. This *ad hoc* group will be charges with the development of a treatment map for AMI patients. This map will include process measures such as time to administration of thrombolytic drugs and time to PCI, and other metrics the group identifies as appropriate. The Maine Quality Forum will work through the MQF Advisory Council to publicly present and discuss the progress of the initiative, with progress benchmarked against the agreed upon measures of success.

- An *ad hoc* working group is convened by the Maine Quality Forum, in consultation with the MQF Advisory Council, in January 2006.

- The new working group, supported by the Maine Quality Forum, develops the consensus treatment map and identifies relevant measures for marking success. Treatment map is in place and collection of data relevant to the project's benchmarks is initiated as of January 2007.

- Recommendations of the *ad hoc* working group regarding the

implementation of incentives to promote adherence to the treatment map are presented to the MQF Advisory Council and to the Governor's Office of Health Policy and Finance for consideration; December 2006.

- Progress of initiative is tracked against agreed upon benchmarks and the project's performance is discussed publicly between members of the *ad hoc* working group, the Maine Quality Forum and the MQF Advisory Council – 2007

RECAP – WHERE WE'RE HEADED AND HOW WILL WE KNOW WE'RE HEADED IN THE RIGHT DIRECTION?

This Plan sets out a number of activities that will set us on the path toward becoming the healthiest state in the nation. The chart below provides a recap of those tasks, deadlines and responsibilities.

Building Needed Infrastructure – Public Health In Maine

- The Governor's Office of Health Policy and Finance will reconvene the Public Health Work Group to establish an agenda for action to accomplish the tasks included in the State Health Plan – February 2006

- The Public Health Work Group will form "Core Competencies Subcommittee," which will develop core competencies, functions and performance standards system for comprehensive community health coalitions. Recommendations will be reported out to the Public Health Work Group, the Governor's Advisory Council on Health Systems Development and to the Legislature's Joint Standing Committee on Health and Human Services – August 2006

- The Public Health Work Group will also form an Interdepartmental Subcommittee which will include representatives of Communities for Children and Youth, the Governor's Office of Health Policy and Finance, DHHS including the Maine CDC and OSA, as well as the Departments of Education, Labor and Corrections, Conservation and Transportation. This subcommittee will develop an inventory of resources as well as a plan for the integration of funding sources to support the public health priorities and functions identified by this Plan. The Interdepartmental Subcommittee will provide a report on its work to the Public Health Work Group, the Governor's Advisory Council on Health Systems Development and to the Legislature's Joint Standing Committee on Health and Human Services – October 2006

- Maine DHHS will make recommendations to the Public Health Work Group on what core functions and deliverables can be supported with existing categorical resources, including through braided together funding – November 2006

- Public Health Work Group will make recommendations on service

areas for braided public health funding to help achieve administrative and programmatic efficiencies, improve health outcomes, and preserve existing appropriate community-based capacity – November 2006

- Maine DHHS will implement joint reporting requirements and system for OSA and HMP grantees – September 2006

- Maine DHHS will complete building linkages to the University System to provide local partnering organizations with enhanced resource availability – September 2006

- The Public Health Workgroup will develop and implement plans for conduits for the multi-directional flow of information, resources, and feedback regarding the State Health Plan – September 2006

- The Public Health Work Group will write report on interim progress and disseminate to stakeholders, including Legislature's Joint Standing Committee on Health and Human Services Committee of the Legislature and the Governor's Advisory Council on Health Systems Development – September 2006

- The Governor's Office of Health Policy and Finance will convene a meeting with federal agencies to include Maine public health leaders (Public Health Workgroup plus State leaders) -- to discuss how they can work together to achieve Maine's goals – September 2006

- Maine DHHS, in consultation with the Public Health Work Group and other appropriate stakeholders, will develop collaboration strategies for communities and state agencies for upcoming WIC, HIV/STD, substance abuse, and home visiting requests for proposals to assure continued improvements in public health infrastructure and community public health capacity – December 2006

- Maine DHHS will work with the Public Health Workgroup to determine how State public health technical assistance for community-based organizations can be more mutually beneficial – December 2006

- Regional epidemiologists are co-located with Public Health Nurses and Health Inspectors – January 2007

- The Public Health Work Group will make recommendations for developing and implementing a training and education program leading to prevention specialist credentialing – January 2007

- The Public Health Work Group will report to the Governor's Advisory Council on Health Systems Development and to the Legislature's Joint Standing Committee on Health and Human Services on any actions taken with regard to the core competencies, functions and performance for comprehensive community health coalitions, the resource inventory and the integration of funding sources. This report will include identification of administrative units and regions of the purposes of administration, funding and the effective and efficient delivery of public health services – January 2007

- Joint Healthy Maine Partnership (HMP) - Office of Substance Abuse (OSA) request for proposals released and contracts awarded that address tobacco, physical activity, nutrition, and substance abuse goals. These funds will primarily address these specific health outcomes; will also strive to improve public health infrastructure and capacity statewide for community health coalitions and sub-state public health departments – June 2007

- Public Health Work Group will continue to monitor and report on progress and advise the State Health Plan and others – on-going

- The Governor's Office of Health Policy and Finance and other state officials will work with Maine's Congressional delegation to encourage the enactment of the Federal Youth Development Act – on-going

Telemedicine and Enhancing Our Ability to Deliver Care

- An expanded telemedicine workgroup is reconvened via a joint invitation from the Maine Health Access Foundation and the Governor's Office of Health Policy and Finance, and will develop a workplan for addressing the range of tasks outlined above – May 2006

- The telehealth workgroup will fashion final recommendations to the Governor regarding the future of telemedicine in Maine and, if appropriate, recommendations regarding how to advance the telemedicine agenda over time – November 2007

Strengthening Maine's Rural Health System

- The Governor's Office of Health Policy and Finance, in collaboration with the Department of Health and Human Services, will solicit cooperation from the Maine Hospital

Association, the Maine Medical Association, the Maine Osteopathic Association and the Maine Primary Care Association, in forming and supporting a Rural Health Working Group – April 2006

- The Governor's Office of Health Policy and Finance, with the collaborating organizations, shall convene a first meeting of the Rural Health Working Group – June 2006

- The Rural Health Working Group will report out policy recommendations to the Governor and the Advisory Council on Health Systems Development, intended to strengthen Maine's rural health systems – December 2006

- The Department of Health and Human Services will rely on the recommendations of the Rural Health Working Group to develop a revised Rural Health Plan for Maine – June 2007

Resource Allocation

This set of activities relates to the Access, Affordability and Quality guideposts.

- The Department of Health and Human Services will convene a workgroup of relevant stakeholders comprising representatives of Maine hospitals, ambulatory care centers, health care professionals and experts in public health to define for the Certificate of Need Program what types of investments called for in this priority will "qualify" a project as having satisfied the criteria for investment in public health, discussed under the first priority for CON projects, above. This workgroup will be convened no later than June 2006 and shall complete its work by September 2006, in advance of the deadline for CON letters of intent for the January 2007 review cycle.

- The Governor's Advisory Council on Health Systems Development will annually review the Capital Investment Fund value and the priorities for Certificate of Need, making recommendations for needed changes in either policy. On-going

Creating a Culture of Health

- The Governor's Office of Health Policy and Finance, with the Maine CDC, will convene a public-private workgroup to review current related activities, design the contract and dissemination strategies & means to measure progress – March 2006

- The working group will complete the "Be Fit" contract – September 2006

- GOHPF and the Maine CDC, assisted by the working group, will complete dissemination strategy to reach maximum number of Mainers – December 2007

- Governor's Office and Maine CDC will launch the "Be Fit for Maine's Future" contract initiative – January 2007

- Maine CDC and GOHPF will work with local public health organizations, MaineCare, providers to encourage participation in the program – on-going

- Maine CDC will add a question to Maine BRFSS to assess progress in engaging public in Be Fit For Maine contracting effort – effective for surveys in 2007

- Maine CDC will assure 15% of Maine people over the age of 10 have completed the contract by June, 2007

- The Maine CDC, GOHPF and the working group will set a new goal for 2007-2008 by September 2007

Promoting Health in the Workplace

- Maine Quality Forum and the Governor's Office of Health Policy and Finance, in collaboration with representatives of the three regional Wellness Councils, will develop a program to broadly disseminate best practices in worksite wellness across Maine. The framework for this strategy will be presented to the MQF Advisory Council for review and feedback – July 2006

- Development of "Wellness Star" standards and benchmarks for business recognition program by Maine Quality Forum staff with assistance from external experts. Final approval from the MQF Advisory Council and the Dirigo Health Agency Board – September 2006

- Validation Process Development for recognition program completed by the Maine Quality Forum staff with assistance from external experts and representatives of the three

regional Wellness Councils – November 2006

- Wellness Star for Businesses Launched by Governor – September/October 2006

- The development of recommendations regarding potential modifications to insurance regulation that create incentives for worksite wellness programs will be the responsibility of the Governor's Office of Health Policy and Finance and the Bureau of Insurance.
  - GOHPF, in conjunction with the Superintendent or his designee, will name an Advisory Committee to assist in this effort – May 2006
  - The Advisory Committee will hold an initial meeting to provide guidance regarding appropriate incentives for worksite wellness programs – no later than July 2006
  - GOHPF, the Bureau of Insurance and the Dirigo Health Agency will work to develop draft recommendations regarding incentives, based upon initial input from the Advisory Committee. Draft recommendations will be presented to the Advisory Committee for review and discussion – October 2006
  - Presentation of final recommendations to the Governor – December 2006

Charting a Course to Address Chronic Care

- MaineCare will implement its care management pilot program, with an eye toward possible expansion of the program in out years – Spring 2006

- The Maine Quality Forum will continue to work with the MQF Advisory Council on support for the adoption of evidence-based practices by both providers and payers. The project described later in the Plan regarding improving the outcomes of care for heart attack patients is an example of one such effort – on-going

- The MHINT initiative will move from a planning phase and into development, perhaps via the establishment of a pilot program among a subset of providers – 2006

- MHINT will expand its implementation efforts, pushing toward statewide interconnectivity by 2010 – 2007

- The Governor's Office of Health Policy & Finance and the Maine Quality Forum will continue to support the growth of *Quality Counts!* as well as the efforts underway in our health centers and health systems, identifying opportunities for collaboration and cooperation – on-going

Primary Care and the Effective Integration of Other Types of Care

- The Maine Center for Disease Control and Prevention will produce and report on an analysis of Maine hospital discharge data for the co-occurrence of diabetes and depression and the differential impact of depression on the outcomes of diabetic care – June 2006

- The Maine Quality Forum will ensure that its activities related to the dissemination of electronic medical records technology are designed to incorporate mental health services settings – June 2006

- The Office of MaineCare Services will perform further analyses of existing data sets to further assess the impact of depression on the utilization and health outcomes of MaineCare members, with special attention paid to that subpopulation of members having serious mental illness – on-going

- The Mental Health/Public Health Work Group will support the Maine Youth Suicide Prevention Program and the Office of Elder Services in their on-going work in suicide prevention. This will include technical assistance in developing educational materials about depression for public distribution, for use in school health education, for the training of community "gatekeepers" and for use in training of direct service providers in long tern care settings. Both youth and elder serving organizations, including education, community, primary care and long term care facilities, will be engaged in activities that promote awareness, early screening and referral for treatment of depression as part of on-going activities in suicide prevention. Additionally, the Mental Health/Public Health Work Group will include representation from the Maine Office of Substance Abuse so as to ensure information regarding screening and interventions for substance abuse are included in technical assistance provided to programs for youth and for elders in suicide prevention – on-going

- MaineCare members enrolled in the MaineCare High Cost Member program who have a chronic medical condition will be screened for depression. This screening will be part of the

routine approach to care for these patients, whether it is carried out by the primary care provider responsible for the member or MaineCare's vendor who will be administering the program Spring 2006 and on-going

- The Maine Center for Disease Control and Prevention will work to increase routine depression screening for adolescents seen in school based health centers, accomplished using mental health funds from the Center, with on-going technical assistance and training on screening in adolescents provided by the Maine CDC and DHHS child and adult mental health staff.. Maine CDC grants to school based centers will include a performance measure for depression screening – July 2006

- School based health centers receiving funding from the Maine CDC will report on the numbers of students screened for depression, depression diagnoses and the numbers of students treated for depression – beginning in State Fiscal Year 2007

- Maine DHHS will develop policies for depression screening in post partum women served by DHHS programs, such as WIC programs and the Maine CDC home visiting program for first-time mothers, but health care providers will also be encouraged to adopt universal screening within obstetric, primary care and pediatric practices. Working with MaineHealth, the Maine CDC Women's Health Program and the Maine Primary Care Association collaboratives on integrating mental health and primary care, the Mental Health/Public Health workgroup will collect data on the number of women screened for depression in the post partum period and support expansion of such screening – beginning June 2006 and on-going

- The DHHS Office of Elder Services and Adult Mental Health will develop policies and procedures for tracking those elders who screen positive for depression, increasing provider awareness of the signs and symptoms of depression and educating providers about evidence-based practices for the treatment of depression in elders – June 2006 and on-going

- Among MaineCare's highest cost members participating in that program's care management pilot program (described in the chronic care section of this Plan), a concerted effort will be made to improve the rate of medication compliance among those members with depression, reducing the rate of medication discontinuance at both 3 and 6 months by 50% - June 2007

- MaineHealth Depression/Primary Care Collaborative will convene a working group comprising DHHS and organizations engaged in

the implementation of integrated depression and primary care to promote shared learning, discuss barriers and identify performance and outcome measures. This group will meet quarterly over the course of eighteen months and will conclude with a statewide conference in the fall of 2007 – beginning April 2007

- The Maine CDC Women's Health Program and the Maine Primary Care Association will report on the outcomes of the project on integrating behavioral health and primary care for women of childbearing age, which is being implemented at four Federally Qualified Health Centers in Maine. This effort will also identify appropriate screening tools for use with women of child-bearing age in primary care, to discover problem drinking. Further, the project will include educational activities related to pain management, including best practices related to prescribing pain medication – October 2007

- The Maine Health Access Foundation integrated mental illness/substance abuse/primary care initiative to conduct an inventory of existing integrated care projects and Care Model and report out findings – July 2006

- The Maine Health Access Foundation will assemble a group of key statewide stakeholders to develop a consensus vision for integrated mental health/primary care, to articulate goals, objectives and strategies for integration and to analyze barriers to integration – December 2006

- The Co-Occurring Disorders Grant (Co-SIG) shared by Adult Mental Health Services and the Office of Substance Abuse will provide training to advance the early identification of mental health issues by substance abuse providers and identification of substance use disorders among persons with mental illness. The project will also develop educational materials regarding potentially adverse interactions between alcohol and the drugs commonly prescribed in mental health settings – on-going

- The Co-SIG project will add a primary care demonstration site, to advance screening and treatment for both depression and substance abuse in primary care - 2007

Access to Affordable Coverage

- The Governor's Office of Health Policy and Finance and the Dirigo Health Agency will participate with The Commonwealth Fund in its initiative to conduct an independent evaluation of

progress to date in Dirigo Health, to identify key successes and areas requiring improvement – Spring 2006 and on-going

- The Dirigo Health Agency will develop and implement a lower cost alternative product and a comprehensive marketing and outreach plan to reach more uninsured and expand DirigoChoice uninsured enrollment by at least 100% -- product development, Spring 2006; enrollment increases by 2007

- The Maine Department of Health and Human Services will complete the redesign of the MaineCare waiver for childless adults to ensure compliance with federal spending limits and with an eye toward re-opening the program to childless adults – on-going

- The Governor's Office of Health Policy and Finance will work collaboratively with stakeholders to assess the potential impact of the 2007 federal budget on Maine's safety net programs as the budget bill works its way through Congress – on-going

- The Governor's Office of Health Policy and Finance and the Maine Bureau of Insurance will work collaboratively to review the effectiveness of Dirigo Health Reform's requirement for 78% loss ratio in small group market in making coverage more affordable in that market, as well as insurance regulation and its impact on premium costs – March 2006

- The Governor's Office of Health Policy and Finance will establish the Health Policy Leadership Forum, representing business, insurers, providers, consumers, and government, to assure ongoing communication and strategy to access affordable coverage – April 2006

- The Dirigo Health Agency and Maine Bureau of Insurance will analyze the effectiveness of the DirigoChoice High Risk Pool – October 2007

- With funding and support from The Robert Wood Johnson Foundation's State Coverage Initiatives, and in collaboration with the Muskie School of Public Service, the Health Policy Leadership Forum, and others, the Governor's Office of Health Policy and Finance will conduct three public educational sessions to explore issues identified by the Forum related to health care coverage – April 2006, September 2006 and February 2007

Quality of Care

- An *ad hoc* working group is convened by the Maine Quality Forum, in consultation with the MQF Advisory Council, in January 2006.

- The new working group, supported by the Maine Quality Forum, develops the consensus treatment map and identifies relevant measures for marking success. Treatment map is in place and collection of data relevant to the project's benchmarks is initiated as of January 2007.

- Recommendations of the *ad hoc* working group regarding the implementation of incentives to promote adherence to the treatment map are presented to the MQF Advisory Council and to the Governor's Office of Health Policy and Finance for consideration; December 2006.

- Progress of initiative is tracked against agreed upon benchmarks and the project's performance is discussed publicly between members of the *ad hoc* working group, the Maine Quality Forum and the MQF Advisory Council – 2007

Accountability

The State Health Plan is a plan for all of Maine, not just State government. This Plan calls on every resident of Maine to take an active role in helping Maine become the healthiest state. It is difficult to hold individuals to account for their roles – that is why we call for a concerted effort to nurture a culture of caring that suffuses our entire community with a shared understanding of how important it is that we strive to improve our health.

However, we can and will track our progress on certain specific tasks – those assigned to entities of State government, holding the public sector accountable for playing its role in bringing us closer to our vision for Maine.

The Governor's Advisory Council on Health Systems Development – which advises the Governor and his staff on matters related to the State Health Plan – will receive regular reports regarding progress on relevant tasks outlined in this Plan. The meetings of the Council are all open to the public and thus serve as an opportunity for any person to "catch up" on the status of Plan progress.

The Council engaged in a far reaching effort to engage members of

the public on the content of this Plan and will continue to look to the residents of Maine for feedback and suggestions as to how the Plan – and our health – might be improved. This effort will include the convening of public forums in cities and towns around the state, not unlike the process undertaken to develop this Plan. Interaction with the public must be nurtured, to ensure that this Plan lives and evolves as the needs of the people of Maine evolve. This Plan is much more than a document – it is a call for action.

At the end of each calendar year, the Council will issue a Plan status report to the Governor and to the Legislature's Joint Standing Committee on Health and Human Services, outlining for legislators progress, shortfalls, victories and challenges. Additionally, the Governor's Office of Health Policy and Finance will provide the Committee with a briefing on the Plan twice yearly, or more frequently should the Committee so desire.

Ultimately, each and every one of us is accountable to ourselves. At the end of this journey, we will celebrate the health of our children, that of our elders and our contemporaries, as well as the health of our state.

APPENDIX ONE

HEALTH CARE EXPENDITURES IN MAINE

PERSONAL HEALTH CARE EXPENDITURES IN MAINE, 1998 – 2005

Maine 1998 estimates are from www.cms.hhs.gov/statistics/nhe/state-estimates-residence/phc-1998.asp. 1999-2005 projections are derived by applying national rates of growth from www.cms.hhs.gov/statistics/nhe/projections-2004/proj2004.pdf to 1998 amount.

Figure Two: Personal Health Care Expenditures ($billions)		1998	Nat'l Chg 98-99	1999 est	Nat'l Chg 99-00	2000 est	Nat'l Chg 00-01
Hospital Services		$1.867	3.9%	$1.940	5.0%	$2.038	8.1%
Physician & Other Professional Services		$1.270	5.2%	$1.336	7.0%	$1.429	8.7%
Home Health Care		$0.187	-3.9%	$0.180	-2.2%	$0.176	6.6%
Nursing Home Care		$0.482	1.3%	$0.488	5.1%	$0.513	6.2%
Dental Services		$0.240	6.0%	$0.254	7.6%	$0.274	8.1%
Medical Durables		$0.060	1.8%	$0.061	2.9%	$0.063	4.0%
Drugs and Other Non-Durables		$0.559	16.2%	$0.649	13.0%	$0.734	12.8%
Other Personal Health Care		$0.343	11.6%	$0.383	8.9%	$0.417	12.0%
TOTAL ($billions)		$5.008	5.7%	$5.293	6.6%	$5.644	8.9%
Gross State Product ($billions)		$31.922	5.0%	$33.519	6.4%	$35.662	4.0%
% of GSP		15.7%		15.8%		15.8%	
Population		1,260,053	0.6%	1,268,097	0.8%	1,278,244	0.6%
Per Capita Personal Health Care Spending ($)		$3,974	5.0%	$4,174	5.8%	$4,415	8.2%

	2001 est	Nat'l Chg 01-02	2002 est	Nat'l Chg 02-03	2003 est	Nat'l Chg 03-04	2004 est	Nat'l Chg 04-05	2005 est
Hospital Services	$2.202	8.5%	$2.388	6.5%	$2.545	7.0%	$2.722	6.7%	$2.903
Physician & Other Professional Services	$1.554	8.2%	$1.681	8.1%	$1.817	7.5%	$1.953	7.1%	$2.091
Home Health Care	$0.188	8.3%	$0.203	9.6%	$0.223	13.0%	$0.252	10.6%	$0.278
Nursing Home Care	$0.545	5.3%	$0.574	3.9%	$0.597	4.2%	$0.621	4.9%	$0.652
Dental Services	$0.296	8.1%	$0.320	4.8%	$0.335	6.5%	$0.357	6.3%	$0.379
Medical Durables	$0.065	6.5%	$0.070	4.1%	$0.072	3.9%	$0.075	2.4%	$0.077
Drugs and Other Non-Durables	$0.828	12.6%	$0.932	9.7%	$1.023	10.6%	$1.132	10.5%	$1.250
Other Personal Health Care	$0.467	10.2%	$0.515	9.3%	$0.562	6.7%	$0.600	10.2%	$0.661
TOTAL ($billions)	$6.144	8.8%	$6.683	7.4%	$7.174	7.5%	$7.711	7.5%	$8.292
Gross State Product ($billions)	$37.094	5.2%	$39.027	4.6%	$40.829	6.1%	$43.336	3.3%	$44.775
% of GSP	16.6%		17.1%		17.6%		17.8%		18.5%
Population	1,286,000	0.8%	1,296,364	0.8%	1,307,000	0.7%	1,316,000	0.8%	1,326,000
Per Capita Personal Health Care Spending ($)	$4,778	7.9%	$5,155	6.5%	$5,489	6.8%	$5,859	6.7%	$6,254

APPENDIX TWO

CAPITAL INVESTMENT FUND

Certificate of Need is a regulatory program that reviews and either approves or denies certain types of projects undertaken by health care providers. In Maine, Certificate of Need review is required for the expansion of existing services or facilities that cost more than a certain amount, the establishment of new services or substantial reductions in capacity of certain types of providers.

In this state, only about 26% of all capital investments made by health care providers (and hospitals are the type of provider most often impacted by CON requirements) fall under CON scrutiny.[150] Those projects that do require review, however, are evaluated by the Department of Health and Human Services, which assesses the proposals against a variety of quality, cost and access considerations.

One of the constraints the law puts on Certificate of Need is an annual limit on the dollar value of the projects approved by the Department of Health and Human Services, which are allowed to go ahead with implementation. This limit is called the Capital Investment Fund (CIF) and is set by the Governor's Office following guidelines approved by the Legislature. The intent of the CIF is to ensure that the infusion of new capital into Maine's health care system remains balanced with Mainers' ability to financially support the added costs of those new investments.

Depending on the number and the cost of proposed projects up for review, the Capital Investment Fund (or "CIF") may or may not be large enough to accommodate approval all of the pending applications. For instance, if the CIF is set at $6 million and projects for which review is sought total up to a combined value of $8 million where no one project exceeds $2 million in costs, not every project will be able to be approved; only $6 million worth of projects can go ahead. In that situation, proposals will compete with one another, with those deemed by the Department of Health and Human Services to be the best applications being approved; the remaining proposals will be turned down.

Considerations in Setting the Capital Investment Fund

The law requires several discrete considerations when setting the CIF. First, it calls for consideration of the average age of plant or infrastructure (bricks and mortar). Average age of plant indicates the relative age, in years, of hospitals' plant and infrastructure. A lower average age implies a newer fixed asset base and less of a need for replacement in the near term.

Available data on this topic are restricted to hospitals; no comparable data (in the public domain) are available for the health care system as a whole. According to *The 2005 Almanac of Hospital Financial & Operating Indicators,*[151] the average age of plant in Maine in 2003 was 9.63 years, as shown in Figure Three. Of the 47 states for which data are available, Maine ranks 20th in terms of average age of plant.

Figure Three: Average Age of Plant

	1999	2000	2001	2002	2003
ME	9.5	9.71	9.77	9.32	9.63
NH	7.55	8.28	8.21	7.89	7.74
VT	8.92	9.62	9.97	9.92	9.22
MA	10.34	9.56	9.56	9.67	10.6
CT	9.49	9.49	10.54	10.27	10.6
NJ	9.63	9.93	10.59	11.14	10.65
NY	10.48	10.16	11.66	11.84	11.42
PA	10.48	10.43	11.32	11.88	11.65
RI	9.12	9.91	10.33	11.47	11.8
NE	9.95	9.82	10.46	10.83	10.65
Rural	9.45	9.71	9.92	10.03	9.96
All	9.22	9.39	9.61	9.76	9.83

While our plant has aged slightly over the past 5 years, Maine has a lower average age of plant than the entire northeast region and tracks the age of plant for both rural hospitals and for all hospitals, as a group. This suggests that the condition of capital in this state tracks that of the nation and is, on balance, similar to that found in our neighboring states, the exception being New Hampshire, which has tracked far below the regional and national averages for several years.

This is not to say that there are no arguably comparable states with an average age of plant less than that of Maine's. Nor is it intended to imply that there is no difference among Maine hospitals with regard to age of plant. Data from the Maine Hospital Association taken from hospital financial income statements[152] show Maine's largest hospitals having a 2003 age of plant of 7.4 years, medium sized hospitals having an average plant age of 9.78 years and small hospitals 10.34 years. Again, this compares to the average age of plant, nationally, of 9.83 years and, in the Northeast, 10.65 years.[153] Certainly, hospitals in each state exhibit a range of plant ages; Maine is no exception. Still, in terms of benchmarking our own state against the region and the country, our hospital community bears up well.

The Almanac provides some other interesting benchmarks for consideration. One is the dollar value of capital costs per discharge, adjusted for differences in wage rates and case mix (Figure Four). "Capital" is the cost of bricks and mortar – or buildings – as well as equipment. Available data indicate the gap between Maine's capital cost per adjusted discharge and that of New Hampshire has been narrowing. While there are no data available for Vermont, Maine has consistently had a higher capital costs per discharge than Massachusetts, as it has compared to the Northeastern region, the nation as a whole, and rural hospitals, generally. This means that Maine's investment in hospital capital (buildings and equipment) is at or above that in other New England states, which, in this regard, serve as reasonable benchmarks for our health care system.

Another measure available is the rate of growth in capital expenditures, which reflects the addition of capital assets (property, plant and equipment) that is added in a single year; a

higher value in this measure indicates a more active program of capital investment in additions and replacement of facilities.

Figure Four: Capital Costs per Discharge (Adjusted for Wage Index & Case Mix), 1999-2003

	1999	2000	2001	2002	2003
ME	$404.87	$414.14	$506.33	$468.29	$469.90
NH	$449.09	$445.07	$545.62	$431.54	N/A
VT	N/A	N/A	N/A	N/A	N/A
MA	$262.46	$161.32	$150.69	$172.73	$144.06
CT	N/A	N/A	N/A	$369.20	N/A
NJ	$409.18	$423.16	$392.20	$463.75	N/A
NY	$328.97	$358.17	$384.17	$310.13	$356.44
PA	$358.41	$321.77	$344.64	$361.99	$393.02
RI	$259.44	$280.30	$255.88	$274.01	$288.43
NE	$355.09	$281.22	$295.41	$309.46	$279.55
Rural	$386.86	$406.72	$397.20	$409.13	$423.77
All	$423.93	$400.40	$395.29	$412.62	$397.67

Data for Maine and benchmarks are shown below in Figure Five. While our rate of growth has been declining, Maine's rate of growth is higher than Vermont's, Massachusetts's, and Connecticut's, the Northeast's, rural hospitals' and the US's with regard to this measure.[154] This implies that we are investing in hospital capital at a faster rate than is generally observed in the benchmark areas.

Figure Five: Capital Expenditure Growth Rates, 1999-2003

	1999	2000	2001	2002	2003
ME	8.4%	11.0%	8.0%	6.9%	6.5%
NH	8.6%	5.3%	8.8%	7.3%	7.2%
VT	6.7%	6.0%	6.3%	6.5%	5.7%
MA	6.0%	5.5%	4.7%	6.3%	5.8%
CT	6.3%	4.3%	3.8%	5.2%	4.8%
NJ	6.1%	4.0%	4.8%	5.3%	7.2%
NY	6.2%	4.7%	4.0%	4.4%	5.3%
PA	5.8%	5.5%	4.8%	6.0%	5.4%
RI	6.9%	6.7%	5.8%	9.9%	8.3%
NE	6.4%	5.5%	5.2%	5.5%	5.7%
Rural	6.6%	6.1%	6.0%	5.7%	5.8%
All	7.1%	6.4%	6.2%	6.2%	6.4%

These data provide little evidence that we should speed up our rate of investment in facilities at the present time. To the contrary, the data show Maine's overall health care costs are high relative to other parts of the nation, indicating, perhaps, that we should slow our rate of investment or focus investment in projects that result in a decrease in operating costs.

Other Considerations

One of the big concerns in setting the CIF is that Mainers not be put at a clinical disadvantage relative to the dissemination of cutting edge technology. The law directs the Governor's Office to consult with the Maine Quality Forum in setting the value of the Fund, specifically with regard to information about new technologies. The value of the Capital Investment Fund is the subject of a rulemaking proceeding and is not part of the State Health Plan. However, the Maine Quality Forum did not identify any technological developments that would necessitate special adjustments to the CIF.

This consideration must be approached with thoughtfulness and balance. Often new technologies require certain levels of patient volume to ensure delivery of the service is of high quality and to promote patient safety. In a rural state like Maine where the population is dispersed across a substantial geographic area, it is difficult for providers to achieve and maintain even minimum levels of activity needed to promote quality care. While it might be more convenient for patients to have cutting edge technology in their own backyards, it is not always safe or cost effective.

APPENDIX THREE

A NEW WAY OF LOOKING AT HEALTH AND HEALTH CARE

Facing up to chronic illness will take a comprehensive and sustained effort. This isn't a problem that can be solved overnight. Not only do we have to develop a new vision of caring for people, we have to be certain to view our health care challenges through a lens that may feel somewhat different to you.

There are multiple aspects to approaching health. These include: prevention, early detection, and treatment/rehabilitation. Within each of these aspects, there are interventions and actions that involve our entire community, from each of us as individuals and neighbors to local town officials, to employers and insurers, health care providers, and state policy makers.

The Governor's Advisory Council for Health Systems Development has assisted in developing a model for conveying a visual representation of this approach. That model is shown on the following pages. Before proceeding to this presentation, though, it's important to understand that this model may be applied to *any* class of health issues or conditions. If the condition you are most concerned about isn't shown here, that doesn't mean we consider it unimportant. While we use the model here to examine some of the state's leading chronic conditions, it can be just as easily applied to, for example, lyme disease, suicide, oral health or any other health issue you can think of. Each of the aspects of the model apply to all health issues – that's why it is so useful in thinking through how we might tackle an issue.

CARDIOVASCULAR DISEASE, CANCER, CHRONIC LUNG DISEASE, DIABETES		
Prevention	**Early Detection**	**Treatment/Rehabilitation**
Modifiable Risk Factors	***Modifiable Risk Factors***	***Modifiable Risk Factors***
Smoking High blood pressure Low HDL/high triglycerides Stress Overuse of alcohol Lack of physical activity Poor nutrition – high BMI Poor air quality Presence of co-morbidities Depression, other mental illness	Smoking High blood pressure Low HDL/high triglycerides Stress Overuse of alcohol Lack of physical activity Poor nutrition – high BMI Poor air quality Presence of co-morbidities Depression, other mental illness	Difficulty accessing coverage and/or services Variation in use and quality of care as well as patient outcomes Health care system not designed to provide optimal care for those living with chronic illness
Interventions	***Interventions***	***Interventions***
- Broad-based educational campaigns healthy lifestyles -- smoking cessation -- exercise programs -- school based programs -- nutrition campaign - individualized education that is personally relevant - appropriate screening for risk factors - Individualized treatment plans that focus on modifiable risk factors such as HBP, depression hyperlipidemia, etc.	-Focused educational efforts directed at patients diagnosed with condition -monitoring by PCP for modifiable risk factors: blood pressure, digital rectal exam, occult blood testing, LDL/triglycerides, smoking status, depression, co-morbidities, history -Supportive assistance for patients and their families who indicate a readiness for change to improve lifestyles -Supportive assistance for providers who are ready to implement population-based care model into	-Effective use of care model in management of patients with one of these chronic conditions -Teaching patients and family members self-management skills to enhance clinical management of patient's condition -Ensure adequate coverage for care of condition as well as for co-morbidities that may impact the chronically ill patient -Moderate increases in the cost of care that may render out of pocket

- Tailoring of policy agenda to support healthy lifestyles, health education, screening, early intervention; need to exploit opportunities to address modifiable risk factors -- public education campaigns -- public health infrastructure & care model -- payment policy for MaineCare and state employees	practice (and inclusion of depression as essential element in implementation of care model) - Assistance for schools engaging in early identification of risk factors in children and their parents for the purposes of targeting interventions	costs for chronically ill patients unable to comply with the management regimen for their condition
Settings	***Settings***	***Settings***
State government Workplace Schools Community Providers	Providers Schools Communities Workplaces Government	Providers Communities Homes Government
Providers	***Providers***	***Providers***
- Primary care providers, specialists, school based providers, care managers in systems, practices and payer settings, hospitals and nurses: screening, education, 5 “A’s” (ask, advise, assess, assist, arrange), provider activation (involvement in community partnerships, policy setting, public education, etc.)	-Implementation and adherence to the care model to ensure appropriate screening for modifiable risk factors -Educate patients regarding the importance of preventive screening measures-help improve health literacy	-Implementation of and adherence to the care model to ensure appropriate management of patients with one of these chronic illnesses -Patient and family education regarding the importance of adhering to treatment and management regimen -Ensure patients have appropriate preventive screenings and interventions (e.g. immunizations) to minimize risk of exacerbations of their condition -Ensure practices are physically and culturally accommodating, so as to facilitate the appropriate use of services by persons with chronic illness who may face extraordinary challenges due to ability, race, ethnicity, culture, etc.
Community	***Community***	***Community***
-Schools: early education re: healthy lifestyles; family education; healthy food choices in cafeteria; exercise programs; school based health centers -Workplace: access to appropriate health benefits; smoke free workplaces; healthy indoor air quality; exercise opportunities; living wage -Community partners/advocates: support for local partnerships programs; support for phys ed in schools as well as healthful menu in	-Community partners: local action to encourage focused screenings in those persons at highest risk -Nurture a local culture of health, encouraging residents to be aware of their own risk factors and how to address them, as well as provide opportunities for screenings and early identification of issues	-Community engagement in implementation of the care model locally. This involves a supportive network of services that interact in a coordinated manner with the clinical community, the patient and the family to assist the patient in self-management, compliance with treatment regimens, etc. -Work to ensure community has necessary access to interactive technology to facilitate the use of telemedicine and the electronic transmission of clinical information.

school cafes; walking trails and sidewalks planned for; support for local Ys; religious organizations walking programs, exercise programs; health advocacy (e.g. Healthy Futures program)		This will expand access, support implementation of the care model and provide opportunities for improved quality of care
Consumers	***Consumers***	***Consumers***
- Enter into a "Be Fit for Maine's Future" contract - Get regular check ups – ask questions! -Know your personal and family health history - Practice healthy lifestyles Weight & nutrition mgt Exercise Smoking cessation -Informed consumer -Productive interactions w/ health care provider -Model healthy behaviors for children	-Strive to be health literate. Learn about your health risks and how you can minimize them. Ask questions of your health care provider -Establish a relationship with a primary care provider – find a "medical home"	-Learn about your condition; make certain you understand how you can contribute to keeping yourself well -Follow the treatment laid out for you by your provider. -If you need help managing your illness, don't be afraid to ask for it -Be open with your providers. Tell each of them what prescriptions you are taking, and give them an honest report of symptoms and concerns. This helps them help you. -If you are sick, do not wait to contact the doctor until you need to go to the emergency room. Get help early.
State Government	***State Government***	***State Government***
-Model healthy behaviors: support exercise programs; insure healthy indoor air quality; provide healthy food choices in cafes -Ensure robust, coordinated statewide public health system is in place and functioning -Implement appropriate incentives and care management for publicly insured populations -Implement policy that supports prevention and the implementation of the care model -Implement policies that support access to care and coverage as well as promote high quality care - Employ strategies that align or braid resources to support the care model down to the local level -Promote supportive environmental policy -Develop bandwidth capability to permit telemedicine connectivity across the state (still have pockets with no access)	- Ensure robust, coordinated statewide public health system is in place and functioning -Support coverage of screening services in public insurance programs	-Work to ensure that every Maine resident has access to appropriate and affordable health care coverage, to facilitate access to needed services -Work to ensure that increases in the cost of care are moderated, to ensure that care remains affordable and our health care system is sustainable -Work to reduce variations in utilization, practice patterns and to optimize patient outcomes -Support dissemination of the care model and those system attributes that contribute to its success -Identify barriers to use of current telemedicine capacity, in an effort to improve access -Support the development of capacity that allows the timely, secure electronic exchange of clinical information; this will facilitate care coordination and quality improvement
Outcomes		
Reduced incidence and prevalence of risk factors -reductions in BMI	-Mainers' rates of screening for modifiable risk factors will increase -Health status indicators will improve for Maine's population	-Variations in utilization, practice patterns will moderate - Patient outcomes will improve

-increases in numbers of people exercising regularly -reduction in the number of new smokers and in the number of quitters -improvements in indoor air quality at work and outdoors		

DEPRESSION		
Prevention	**Early Detection**	**Treatment/Rehabilitation**
Modifiable Risk Factors	***Modifiable Risk Factors***	***Modifiable Risk Factors***
General: Economic, social, interpersonal stress; Physical disability, Co-occurring medical issues; Emotional/physical abuse and other trauma; Lack of social supports; Isolation; Rx interactions/side effects; Substance abuse; Major life changes; **Children:** Mental illness/substance abuse in parent, family economic or marital stress, caregiver disorganization, academic difficulties, learning disabilities **Teens and young adults**: Difficulties fitting in with peer group; learning, attentional, cognitive, academic issues, school environment that supports bullying, exclusion; lack of community opportunities for healthy social, recreational activities **Elderly:** Cognitive decline, failing health, loss of independence, loss of home, death of partners, friends, increased sensitivity to med side effects	Lack of awareness of early signs Lack of information about high risk groups across the general population	Lack of social supports; Unrecognized PTSD; Abusive setting/situation; Co-occurring morbidity from physical illness(includes substance abuse; Discontinuation of prescribed medication; Unacknowledged impact of major life change Stigma; lack of access (lack of provider capacity, transportation, insurance etc)
Interventions	***Interventions***	***Interventions***
Education re depression and principles of good mental health for all; Identification and development of mental health promotion, mental illness prevention strategies (learning from public health and from substance abuse prevention) (a field in its infancy) Importance of social networks and social support **Stigma Reduction**: Reduce stigma associated with depression (MI) through media campaign of well known people talking about their experience with depression; Effect recommendations of SAMSHA on reducing stigma; integration of depression screening as routine part	Routine screening for Depression by pediatricians, other primary care providers Routine screening for Substance Abuse; Public education for all re signs and symptoms of depression, (akin to campaigns to have public identify signs of a heart attack or a stroke) l; Routine depression screenings in schools, community and nonbehavioral health settings; Parenting “classes” and support groups in nonbehavioral health settings; Early identification and referral of academically struggling, withdrawn and aggressive children by	Accurate Diagnosis and Functional Assessment; Medication; Hospitalization; Counseling/therapy; Protective Intervention by public safety, social services personnel; Construction of network of social supports including family as appropriate; Goal Setting and measurement of achievement; Education re illness and health maintenance (nutrition/exercise/smoking cessation)

of primary care; statewide campaign promoting concept that mental health is part of health and important for optimal functioning of all citizens. Early identification of at risk babies/ new parents; Parenting "classes" and support groups in nonbehavioral health settings; Identification of high risk family units/parents in community settings; early identification and support for children at risk academically or socially. Early identification of vulnerable children by pediatricians, teachers, coaches, group activity leaders (scouting); Resiliency training for vulnerable kids; Special training for teachers re bullying intervention and reduction; Routine depression screening as part of health check-up for all ages; routine screen for postpartum depression Trainings and discussions with local public safety and legal/judicial players to identify kids(and adults) in trouble early in their contact with these systems ; Community opportunities for teens and young adults for skill building social, recreational, vocational activities. Trainings and materials for workplace supervisors re creating healthy workplace Outreach for disabled persons, shut ins, elderly.	pediatricians, teachers, coaches, group activity leaders (scouting); Trainings and discussions with local public safety and legal/judicial players to identify depressed kids(and adults)early in their contact with these systems ; Trainings, materials, and referral resource databases for human resource professionals and workplace supervisors	
Settings	***Settings***	***Settings***
State government, Schools; PCPs'/nps' offices; Senior Centers; Workplace; Health care settings; Community settings	Schools; after school activities settings; Places of worship; Health care settings Senior Centers	Outpatient mental health provider (s); PCP/NP office; inpatient
Providers	***Providers***	***Providers***
- Support for integration of mental health competency, screening and treatment in healthcare settings (including school health clinics) across the state - Education curricula for primary care providers, office staff. Development of psychiatric consultation teams to	Training on evidence based screening tools and interventions supported by payors, state agencies, medical societies, mental health specialists and public health educators; registry of depressed patients in each practice; Inclusion of mental health/substance abuse	PCP/NP ; Mental health professionals using co management model (produces best outcomes); Continuity of care and communication between hospital, psychiatric consultant, mental health provider and health care provider. Use of protocols, algorithms for

support/educate primary care providers. - Telemedicine support for psychiatric education and consultation. Creation of educational materials for provider offices. - Education for providers on screening for trauma (of all varieties), assessment of stress disorder, psychological first aid for stress reduction.	assessment fields in EMR. Integration of mental health services in school health clinics. Identification and referral of vulnerable/depressed kids and adults performed by teachers, clergy, after school activity leaders, PCPs/NPs, public safety personnel	psychopharmacology. Use of outcome measures to guide treatment decisions. Support for evidence based practices. Community health agency Screening for PTSD, Substance abuse
Community	***Community***	***Community***
DV providers; schools; HMPs; community education Departments of hospitals; identification of and check-in with vulnerable kids and adults performed by teachers, clergy, after school activity leaders, pcps/nps, public safety personnel Education on trauma awareness and principles of psychological first aid for public safety, teachers and other community members. Workplace: Engaging employers in supporting parity in insurance, pay for performance for depression screening, EAP programs that are accessible, antistigma campaigns in the workplace, recognition of link between depression and decreased, productivity, absenteeism	Hospital Depression Screening days Employer support for depression screening through the workplace Employer support for insurance support/pay for performance for depression screening (Pay for PHQ-9 as for glucose tolerance test) and for care model for depression	Social support groups sponsored by places of worship, senior centers; hospital health education programs Employment/employer support. Transportation. Safe housing options. Equal access to recreational, social opportunities Anti stigma campaigns
Consumers	***Consumers***	***Consumers***
Productive discussions with health care provider; Healthy lifestyles; Informed consumer re family history, personal vulnerabilities, and signs and symptoms of depression and its relationship to physical illness	Productive discussion with pcp/np; Healthy lifestyle; Identification and utilization of natural supports; Recognition of “red flags”	Active participant in treatment planning process; Active participant in goal setting process; Goals for recovery – re-engagement in community, family, work. Active engagement in treatment; Self-Management of maintenance regimen; Recognition of “red flags” and action steps to take; Medication compliance
State Government		
Include depression and mental illness in advocacy/policies/public funding for care model, integrated care, quality indicators for depression Anti-stigma campaign: mental health is everyone’s issue Training for state agency work force in awareness of impact of depression		

in clients they serve, in non behavioral health settings (Education, Corrections, Elderly, Child Protective, Mental Retardation) Creation of statewide, web based training materials Promotion of EMR and Personal Health record (MHINT) in Maine that includes mental health information. Include mental health issues in integrated data systems and data analysis of existing data sources to identify high risk populations and co-morbidity; relation to high medical costs, substance abuse, smoking, obesity, cardiovascular health Staff to provide linkage from mental health to public health to provide technical assistance and support to public health programs (e.g STD's, maternal and child health, primary care, suicide prevention, emergency preparedness etc.) Support for identification and development of strategies for mental health promotion/mental illness prevention		
Outcomes	***Outcomes***	***Outcomes***
Public awareness of factors contributing to good mental health; Community efforts to reduce environmental risk factors for ; Early identification of vulnerable kids and adults	Early diagnosis and referral to appropriate treatment as much as possible within the primary care system; Early resolution of depressive symptoms; Return to usual activities	Recovery from illness Return to usual activities Risk factor reduction; Relapse plan;

SUBSTANCE ABUSE		
Prevention	**Early Detection**	**Treatment/Rehabilitation**
Modifiable Risk Factors	***Modifiable Risk Factors***	***Modifiable Risk Factors***
Availability of drugs (incl. tobacco/alcohol); Laws/norms accepting of drug/ alcohol use; Chaotic home environments and ineffective parenting; School failure; Poor peer relationships; Poor coping skills; Behavioral disorders; Youth-oriented marketing by alcohol and prescription drug companies	Recreational use of drugs and alcohol; Lack of knowledge of lifestyle risk factors; Lack of knowledge of physiological risk factors	Difficulty accessing services; Variation in treatment quality; Non-compliance with therapeutic regimen; Disengagement from social supports; Physical illness due to substance use; Stigma of being identified as an addict
Interventions	***Interventions***	***Interventions***
Law enforcement re: sales to minors and social access (furnishing and underage possession); Evidence-based prevention programs targeting community based risk and protective factors; Public education; Environmental strategies that address marketing and public perception of norms; Responsible retailing; Parent education and support	PCP/NP screening during routine and brief intervention; Peer, parent, counselor discussion about substance use; Referral for assessment/evaluation Effective education through court/school/workplace diversion programs; Consistent effort to address early signs of misuse—policy and law violations	Comprehensive assessment; Accurate diagnosis; Detox; residential treatment with varying lengths of stay; Intensive Out-patient treatment; Outpatient treatment; Medication assisted treatment; Coordinated with primary and other specialty care for people with co-occurring disorders; Self-help
Settings	***Settings***	***Settings***
Schools/colleges Families Community Workplace Health care settings Religious institutions	Schools; Athletic activity settings; Community Home; Health care provider setting; Workplace	SA programs; PCP community
Providers	***Providers***	***Providers***
PCP: Ask about use/educate patients about risks; Youth workers/social service agencies: education and identification;	SA counselors; PCP/NP: screening and brief intervention	SA professionals: provide CBT, motivational interviewing and other proven techniques MD, NP: brief intervention
Community	***Community***	***Community***
Law enforcement: establish and support community norms; inform	Peers: inform parents and school officials when concerned about	Peers: self-help

parents of concerns; Volunteers/coalitions: Identify community problems and develop action plan; School and college personnel: Develop and enforce policy supporting non-use; identify students who are at risk; EAPs/wellness teams: Workplace programs that support healthy lifestyles Clergy: support community actions Retail stores: responsible retailer activities including server training and modifying point of sale advertising	friends Law enforcement: enforce laws and provide support for community norms School/college personnel: develop and enforce policiies Parents: support each other and create and enforce rules in the home Employers: testing and referral to treatment	
Consumers	***Consumers***	***Consumers***
Parents: establish and enforce rules; support each other; Kids participate in discussions about risk taking behaviors; Assess personal risk factors including family history	Productive discussions with PCP, family members, educators, peers, counselors; Commitment to healthy lifestyle	Commitment to treatment program; Commitment to recovery; Relapse plan; Engagement in goal setting
State Government	***State Government***	***State Government***
Identify targets Provide funding support and guidance	Technical assistance Linking of resources Connection with research and best practice Intervention services provided to publicly insured patients	Training and technical assistance Quality assurance Funding of services Connection with research and evidence-based practice
Outcomes	***Outcomes***	***Outcomes***
Increase % of youth who remain alcohol/drug free Increase age of first use from baseline to target (different for different drugs);	Reduction of risk taking behavior, i.e. binge drinking, pharming Reduce recidivism among first offenders Reduce high risk drinking, alcohol related injury and personal problems due to alcohol consumption 10% reduction in binge drinking for adolescents 5% decrease in binge drinking for young adults Reduce fetal alcohol syndrome by reducing use by pregnant women	Recovery: increase in proportion of patients abstinent at time of discharge Increase in treatment recruitment and retention, i.e. shorter waive for treatment services and reduced treatment drop out rate 5% shorter wait time for services 10% increase in completion rate

ENDNOTES

[1] *Statehealthfacts.org.* Kaiser Family Foundation. Accessed on-line: www.statehealthfacts.org. The data on this site are derived from the US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, Compressed Mortality File, 1999-2002, Series 20, No. 2H 2004 on CDC Wonder On-line Database. Comparative data are age-adjusted and are for all races. See Kaiser website for definitions of ICD-10 codes used to identify deaths by particular cause.

[2] Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2004.

[3] Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2004.

[4] US Preventive Services Task Force. *The Guide to Clinical Preventive Services, 2005.* Agency for Healthcare Research and Quality, US Department of Health and Human Services, 2005.

[5] Bureau of Health. *Healthy Maine 2010: Longer and Healthier Lives."* Maine Department of Human Services.2002.

[6] American Lung Association of Maine website: www.mainelung.org
[7] Bureau of Health. *Healthy Maine 2010: Longer and Healthier Lives."* Maine Department of Human Services.2002.

[8] Bureau of Health. *Healthy Maine 2010: Longer and Healthier Lives."* Maine Department of Human Services.2002.

[9] Bureau of Health. *Healthy Maine 2010: Longer and Healthier Lives."* Maine Department of Human Services.2002.

[10] Bureau of Health. *Healthy Maine 2010: Longer and Healthier Lives."* Maine Department of Human Services.2002.

[11] Data available at http://quickfacts.census.gov

[12] Maine has 2.9 hospital beds per 1000 residents. This compares to 2.6/1000 in Vermont, 2.3 in New Hampshire, 2.5 in Massachusetts, 2.2 in Connecticut, and 2.3 in Rhode Island. Nationally, there are 2.8 beds/1000. Source: http://www.statehealthfacts.kff.org/cgi-bin/healthfacts.cgi?action=compare&category=Providers+%26+Service+Use&subcategory=Hospitals&topic=Beds

[13] US Census. www/census.gov/population/projections/PressTabs5.xls. May 9, 2004.

[14] US Census. http://quickfacts.census.gov/qfd/states/23000.html

[15] Bodenheimer T. "High and Rising Health Care Costs. Part 1: Seeking and Explanation." *Ann Intern Med.* 2005;142:847-854.

[16] Lantz PM, House JS, Lepowski JM, Williams DR, Mero RP, Chen J. "Socioeconomic Factors, Health Behaviors, and Mortality." *Journal of the American Medical Association.* 279:1703-1708. 1998.

[17] Deaton A. "Health, Income, and Inequality." NBER Reporter: Research Summary Spring 2003. Accessed at www;nber.org/reporter/spring03/health.html. September 27, 2005.

[18] www.census.gov/population/projections/PressTabs5.xls. May 9, 2005.

[19] Personal communication with Catherine Reilly, State Planning Office, November 3, 2005.

[20] Governor's Office of Health Policy and Finance. *The State of Maine's Health: A Regional Comparison.* Office of Governor John E. Baldacci. August 2005. May be accessed electronically at: http://www.dirigohealth.maine.gov/State%20of%20Maine%27s%20Health%20-%208-05.pdf

[21] Bodenheimer T. "High and Rising Health Care Costs. Part 1: Seeking and Explanation." *Ann Intern Med.* 2005;142:847-854.

[22] Davis K, Doty MM, Ho A. "How High is Too High? Implications of High-Deductible Health Plans." The Commonwealth Fund. April 2005.

[23] Thorpe KE, Florence CS, Joski P. "Which Medical Conditions Account For the Rise in Health Care Spending?" *Health Affairs Web Exclusive.* August 25, 2004. www.healthaffairs.org.

[24] These figures are derived by trending data from prior years. Maine 1998 estimates are from www.cms.hhs.gov/statistics/nhe/state-estimates-residence/phc-1998.asp. 1999-2005 projections are derived by applying national rates of growth from www.cms.hhs.gov/statistics/nhe/projections-2004/proj2004.pdf to 1998 amount.

[25] Anderson GF, Hussey PS, Frogner BK, Waters HR. Health Spending in the United States and the Rest of the Industrialized World. *Health Affairs.* 24(4);903-914. Maine value calculated using data from the US Department of Health and Human Services, Centers for Medicare and Medicaid Services, Office of the Actuary.

[26] *See* the website of the Maine Quality Forum: http://www.mainequalityforum.gov/chart_08.html

[27] Kilbreth E., Ziller E., Payne S. *Trends in Health Services Costs and Utilization, 1995-2001: An Analysis of a Privately Insured Population in Maine.* University of Southern Maine Muskie School of Public Service. October 2005.

[28] Data are for 2001. US Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute. "Cancer incidence per 100,000, 2001. US Cancer Statistics Working Group. United States Cancer Statistics: 1999-2001 Incidence and Mortality." 2004. Accessed via the Internet: http://cdc.gov/cancer/npcr/uscs.

[29] Data are for 2002. US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics. Compressed Mortality File, 1999-2000. Series 20, No. 2H 2004 accessed via the Internet on CDC WONDER On-line database.

[30]Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2003.

[31] Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2003.

[32] Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2004.

[33] Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2002.

[34] Data are for 2001. US Department of Health and Human Services, Centers for Disease Control and Prevention. Prevalence of Physical Activity, Including Lifestyle Activities Among Adults – United States, 2000-2001. Mortality and Morbidity Weekly Report. Vol. 52(32). August 15, 2003.

[35] Data are for 2002-2003. US Department of Health and Human Services, Centers for Disease Control and Prevention, National Immunization Program. Estimated Vaccination Coverage with Individual Vaccines and Selected Vaccination Series Among Children 19-35 Months of Age by State – US National Immunization Survey, Q3/2002 – Q2/2003. Accessed via the Internet at: http://www.cdc.gov/nip/coverage/NIS/02-03/toc-02-3./htm.

[36] Data are for 2002. US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies. State Estimates of Substance Use from the 2002 National Survey on Drug Use and Health. Table. A-8. Accessed via the Internet at: http://www.oas.samhsa.gov/

[37] Data are for 2002. US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies. . State Estimates of Substance Use from the 2002 National Survey on Drug Use and Health. Table A-11. Accessed via the Internet at: http://www.oas.samhsa.gov/

[38] Institute of Medicine. 1988.

[39] Maine Department of Labor. *Health Care Employment Trends in Maine.* Labor Market Information Services. October 2005.

[40] "Health Care Workforce Leadership Council Final Report." October 2004.

[41] Fowler S, McFarland S. "Professional Growth of the Lewiston/Auburn Healthcare Workforce: Where They Are, Where They Want to Be, What's Keeping Them from Getting There." 2005.

[42] Nicoll LH, Samia L. "Geriatric Provider Education Needs Assessment and Recommendations." Maine Geriatric Education Center. 2005.

[43] Molloy R. "Solutions for Maine Health Careers Recruitment and Retention: A Visionary Approach." University of New England College of Osteopathic Medicine." 2005.

[44] OMNE Nursing Leaders of Maine. December 2005 – Updated Status of Maine's Nursing Workforce.

[45] Molloy R. "Solutions for Maine Health Careers Recruitment and Retention: A Visionary Approach." University of New England College of Osteopathic Medicine." 2005.

[46] *See,* for instance, Wennberg DE and Wennberg JE. "Addressing Variations: Is There Hope For The Future?" *Health Affairs Web Exclusive.* W3-614; DOI 10.1377/hlthaff.W3.614. December 10, 2003. *See,* also: Wennberg JE and Cooper MM. *The Dartmouth Atlas of Health Care in the United States.* Dartmouth Medical School, Center for the Evaluative Clinical Sciences. 1996.

[47] Minutes from April 5, 2005 meeting, "Enhancing Current Telemedicine Services," sponsored by the Maine Health Access Foundation.

[48] Institute of Medicine. *Quality Through Collaboration: The Future of Rural Health.* National Academies Press. Washington DC. 2005.

[49] DHHS is currently reviewing MaineCare's telemedicine policy.

[50] 2 MRSA c. 5 §103

[51] Kane N. Maine Hospital Financial Performance: 1993-2002. Presentation to Commission to Study Maine's Community Hospitals, June 21, 2004.

[52]Kane N. Maine Hospital Financial Performance: 1993-2002. Presentation to Commission to Study Maine's Community Hospitals, June 21, 2004.

[53] This excludes beds in psychiatric hospitals and in other types of specialty hospitals (such as rehabilitation facilities).

[54] In August 2005, the Governor's Office of Health Policy and Finance (GOHPF) published *The State of Maine's Health*, a data book examining aspects of Maine's health and health care system as compared to the nation as a whole and across regions within Maine. That booklet provides much useful baseline information on differences in health status and the burden of disease within Maine as well as information on the distribution of certain types of resources across the state.

[55] Kaiser Family Foundation. *Trends and Indicators in the Changing Healthcare Marketplace.* April 2004.

[56] *See,* for instance, Wennberg DE and Wennberg JE. "Addressing Variations: Is There Hope For The Future?" *Health Affairs Web Exclusive.* W3-614; DOI 10.1377/hlthaff.W3.614. December 10, 2003. *See,* also: Wennberg JE and Cooper MM. *The Dartmouth Atlas of Health Care in the United States.* Dartmouth Medical School, Center for the Evaluative Clinical Sciences. 1996.

[57] Wennberg JE and Cooper MM. *The Dartmouth Atlas of Health Care in the United States.* Dartmouth Medical School, Center for the Evaluative Clinical Sciences. 1996.

[58] U.S. General Accounting Office. Health Care: Unsustainable Trends Necessitate Comprehensive and Fundamental Reforms to Control Spending and Improve Value; Highlights of a GAO Forum. www.gao.gov/cgi-bin/getrpt?GAO-04-793SP.

[59] Anderson GR, Hussey PS, Frogner BK, Waters HR. "Health Spending in the United States and the Rest of the Industrialized World." *Health Affairs.* 24(4). Maine figure calculated using data from the federal DHHS Centers for Medicare and Medicaid Services, Office of the Actuary.

[60] World Health Organization. *The World Health Report 2000: Health Systems – Improving Performance.* Geneva, Switzerland. 2000.

[61] Center for the Evaluative Clinical Sciences. "Supply Sensitive Care." Dartmouth Atlas Project. 2005-11-14 B. Accessible at: www.dartmouthatlas.org.

[62] *See*, for example: Fisher ES, Wennberg DE, Stukel TA Gottlieb DJ, Lucas FO and Pnder EL. The Implications of Regional Variations in Medicare Spending. Part1: The Content, Quality, and Accessibility of Care. *Ann Intern Med.* 2003;138:273-287. Fisher ES, Wennberg DE, Stukel TA Gottlieb DJ, Lucas FO and Pander EL. "The Implications of Regional Variations in Medicare Spending. Part 2: Health Outcomes and Satisfaction with Care." *Ann Intern Med.* 2003;138:288-298.

[63] Deprez RD, Stason WB, Asdigian N, Diels-Ross J, Phalen J, Swoboda P, Battabriga G. "Executive Summary: Cardiovascular Services Demand Needs Study." Prepared for the Maine Department of Human Services. September 15, 2000.

[64] 30-A MRSA c. 187, §4312(3)(a)

[65] Pre-filed expert testimony of John Shiels, Lewin Associates; filed in the matter: Review of Aggregate Measurable Cost Savings Determined by Dirigo Health for the First Assessment Year, Docket No. INS-05-700; page 15, line 11-18. October 2005.

[66] Inclusion of this reference should in no way be construed as agreement by the State with the conclusion drawn from the data with regard to the matter of the Dirigo Savings Offset Payment; in that case, it is our view that the manner in which the expert applied the data referenced was erroneous.

[67] *See for example:* Haber D and Rhodes D. Health Contract With Sedentary Older Adults. *Gerontologist.* 44(6):827-835; _____. Behavioural counselling in general practice for the promotion of health behaviour among adults at increased risk of coronary heart disease: randomized trial. *British Medical Journal.* 1999, 319(7215):943-7; ____. Behavioral contracting as a tool to help patients achieve better health. *Family Practice.* 1991. 8(4):336-42.

[68] Bangor Region Chamber of Commerce. "Good Health is Good Business! Bangor Region Wellness Council." April 2005.

[69] Comments of Dan Dauphinee, Northeastern Log Homes, Inc., State Health Plan Public Hearing, November 30, 2005.

[70] Institute of Medicine. "Health Literacy: A Prescription to End Confusion." Report Brief, April 2004.

[71] Institute of Medicine. "Health Literacy: A Prescription to End Confusion." Report Brief, April 2004.

[72] RTI International. "literacy and Health Outcomes" AHRQ Evidence Report/Technology Assessment, No. 87. AHRQ Publ. N0. 04-E007-2. January 2004.

[73] These figures are derived using the methodology employed in Thorpe KE, Florence CS, Joski P. "Which Medical Conditions Account For the Rise in Health Care Spending?" *Health Affairs Web Exclusive.* August 25, 2004. www.healthaffairs.org, as applied to Maine.

[74] Maine Department of Health and Human Services, 2001-2002.

[75] Maine Department of Health and Human Services; Maine Health Data Organization UHDDS 2002, 2003.

[76] BRFSS data set, 2002-2003.

[77] Maine Department of Health and Human Services, 2001-2002

[78] BRFSS data set, 2002-2003

[79] There is a difference between "overweight" and obesity which is related to body mass index. The body mass index of a person who is overweight is lower than that of a person with obesity. In Maine, our rate of obesity is lower than the national average, but the prevalence of overweight is higher than the national average, putting more Mainers at risk of becoming obese.

[80] Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2002, 2003.

[81] Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2002, 2003.

[82] Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2002, 2003.

[83] 2002 National Survey on Drug Use and Health, Center for Substance Abuse Prevention Data Coordinating Center. *Substance Abuse and Mental Health Services Administration (http://www.epidcc.samhsa.gov/data/data.asp)*

[84] YRBS data set, 2005.

[85] Institute of Medicine. *Crossing the Quality Chasm: A New Health System for the 21*PPP*st*PPP *Century.* National Academy Press. Washington DC. 2001.

[86] Wagner EH, Austin BT, Von Korff M. Improving outcomes in chronic illness. *Managed Care Q.* 1996 Spring; 4(2): 12-25.

[87] Wagner E. "Chronic Disease Management: What Will It Take to Improve Care for Chronic Illness?" *Eff Clin Practice.* 1998; 9(1).

[88] Wagner E. "Chronic Disease Management: What Will It Take to Improve Care for Chronic Illness?" *Eff Clin Practice.* 1998; 9(1).

[89] The World Health Organization World Mental Health Survey Consortium. "Prevalence, Severity, and Unmet Need for Treatment of Mental Disorders in the World Health Organization World Mental Health Surveys." *JAMA.* 291(2):2581-2590.

[90] US Surgeon General. Mental Health: A Report of the Surgeon General. US Department of Health and Human Services. Washington DC. 1999.

[91] Kessler RC, et al. "Prevalence and treatment of mental disorder, 1990 to 2003" *N Engl J Med.* 200*;* 353 (11): 1184.

[92] "Depression, Maine". Maine Health Information Center, August 2004.

[93] Freeman MP, et al. "Postpartum depression assessments at well-baby visits: screening feasibility, prevalence, and risk factors". *Womens Health.* 2005;14(10):929-35.

[94] "Depression, Maine". Maine Health Information Center, August 2004.

[95] Foster S, *et al*. *School Mental Health Services in the United States 2002-2003.* US Dept of Health & Human Services, Substance Abuse & Mental Health Services Administration.

[96] McGuire C, *et al*. "Nursing Facility MDS Data". Muskie School of Public Service University of Southern Maine. December 2005.

[97] Luber MP, *et al.* "Depression and service utilization in elderly primary care patients." *Am J Geriatr Psychiatry.* 2001. Spring: 9(2):169-76.

[98] Cully JA, *et al.* "Geriatric Depression, Medical Diagnosis, and Functional Recovery During Acute Rehabilitation." *Arch Phys Med Rehabil.* 2005. Dece;86(12):2256-2260.

[99] Callahan, C. "Reducing Depression Slows Physical Decline in the Elderly." *J Am Geriatr Soc.* 2005;53:367-373.

[100] Yamanaka G, *et al.* "Depressive mood is independently related to stroke and cardiovascular events in a community." *Biomed Pharmacother.* 2005 Oct. 59 Suppl 1:S31-9.

[101] Larson, SL, *et al.* "Depressive Disorder, Dysthymia, and Risk of Stroke." *Stroke.* 2001;32:1979.

[102] Gump BB, *et al.* "Depressive symptoms and mortality in men: results from the Multiple Risk Factor Intervention Trial." *Stroke.* 2005 Jan.;36(1):98-102.

[103] Eaton WW. "Depression Increased the Risk of Diabetes – 13-year prospective community-based follow-up study." *Diabetes Care.* 1996;10:1097-1102.

[104] Kawakami N, *et al.* "8-year Japanese workplace follow-up study – Adjusted odds ratio of 2.3 for onset of diabetes among depressed men." *Diabetes Care.* 1999☹7):1071-1076.

[105] "Increased morbidity and mortality from Cardiovascular Disease in depressed patients. Depression and Cardiovascular Disease: 6 and 18 Month Coronary Fatalities After Acute MI." *Psychosom Med.* 2004. Nov-Dec;66(6):814-22. Available on-line at: 222.phsychcme.net.

[106] Van Mell JP, *et al.* "Prognostic association of depression following myocardial infarction with mortality and cardiovascular events: a meta-analysis." *Psychosom Med.* 2004. 66(6):814-22.

[107] De Denus S, *et al.* "History of depression as a predictor of adverse outcomes in patients hospitalized for decompensated heart failure." *Pharmacotherapy.* 2004 Oct.; 24(10):1306-10.

[108] Junger J, *et al.* "Depression increasingly predicts mortality in the course of congestive heart failure." *Eur J Heart Failure.* 2005 Mar 2;7(2):261-7.

[109] Rumsfeld JS, *et al.* "Depression predicts mortality and hospitalization in patients with myocardial infarction complicated by heart failure." *Am Heart J.* 2005 Nov; 150(5):961-7.

[110] Ghose SS, *et al.* "depression and other mental health diagnoses after stoke increase inpatient and outpatient medical utilization three years poststroke." *Med Care.* 2005;43(12):1259-64.

[111] Clechanowski PS, e*t al.* "Impact of depressive symptoms on adherence, function, and costs." *Arch Intern Med.* 2000;160(21):3278-85.

[112] Carney RM, *et al.* "Depression, the autonomic nervous system, and coronary heart disease. *Psychosom Med.* 2005;67 Suppl 1:S29-33.

[113] Serebruany MD, Victor L, *et al.* :Platelet/Endothelial Biomarkers in Depressed Patients Treated with the Selective Serotonin Reuptake Inhibitor Sertaraline After Acute Coronary Events." *Circulation.*

[114] Sauer MD, *et al.* "Selective Serotonin Reuptake Inhibitors and Myocardial Infarction." *Circulation.* 2001;104"1894.

[115] Child J, Shimbo D, *et al.* "exaggerated serotonin-mediated platelet reactivity as a possible link in depression and acute coronary syndromes." *Am J Cardiol.* 2002;89(3):331-3.

[116] Schins A, *et al.* "Increased coronary events in depressed cardiovascular patients: 5-HT2A receptor as missing link?" *Psychosom Med.* 2003;65(5):729-37.

[117] National Heart Lung Blood Institute. *Report of the NHLBI working Group Assessment and Treatment of Depression in Patients with Cardiovascular Disease.* National Institutes of Health. 2004. Accessed on line: www.nhlbi.nih.gov.

[118] "Depression, Maine". Maine Health Information Center, August 2004.

[119] MISSING FROM ELSIE'S LIST

[120] Pearson SD, *et al.* "Depression among high utilizers of medical care." *J Gen Intern Med.* 1999;14(8):461-8.

[121] Henk HJ, *et al.* "Medical costs attributed to depression among patients with a history of high medical expenses in a health maintenance organization." *Arch Gen Psychiatry.* 1996;53(1):899-904.

[122] Frasure-Smith N, *et al.* "depression and health-care costs during the first year following myocardial infarction." *J Psychosom Res.* 2000;48(4-5);317-20.

[123] Barry CL, *et al.* "Improving the Quality of Depression Care in Medicaid.´ *Psych Svcs.* 2005;56(10):1193-95.

[124] "Depression, Maine". Maine Health Information Center, August 2004.

[125] US Department of Health and Human Services. *Oral Health in America: A Report of the Surgeon General.* US Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health. September 2000.

[126] U.S. Department of Health and Human Services. *National Call to Action to Promote Oral Health.* Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, National Institute of Dental and Craniofacial Research. 2003.

[127] Hadley J. Sicker and Poorer: The Consequences of Being Uninsured. *Medical Care Research and Review.* 60(2)(supplement):3S-75S. June 2003.

[128] McLaughlin CG and Wyszewianski L. Access to care: remembering old lessons. *Health Services Research.* December 2002.

[129] Donabedian A. *Aspects of Medical Care Administration: Specifying Requirements for Health Care*. Harvard University Press. Cambridge, MA. 1973.

[130] Mercer Human Resource Consulting, "Surprise slow-down in US health benefit cost increase: Employers shift costs to employees, take steps to improve workforce health," December 8, 2003.

[131] Muskie School of Public Service, University of Southern Maine. Data from household survey sponsored by Maine's HRSA planning grant. 2002.

[132] Muskie School of Public Service, University of Southern Maine. Data from household survey sponsored by Maine's HRSA planning grant. 2002.

[133] Uwe E. Reinhardt, Peter S. Hussey and Gerard F. Anderson. "U.S. Health Care Spending In An International Context." *Health Affairs*, Vol 23, Issue 3, 10-25.

[134]Kaiser Family Foundation, State Health Facts Online, www.statehealthfactsonline.org

[135] Muskie School of Public Service, University of Southern Maine. Data from household survey sponsored by Maine's HRSA planning grant. 2002.

[136] Kaiser Family Foundation, "Uninsured and Their Access to Health Care", Jan. 2003 Fact Sheet 1420-oy

[137] Jack Hadley, Sicker and Poorer: The Consequences of Being Uninsured, the Urban Institute, Washington, D.C., May 2002.

[138] AARP, *Reforming the Health Care System: State Profiles 2003*.

[139] Muskie School of Public Service, University of Southern Maine. Data from household survey sponsored by Maine's HRSA planning grant. 2002.

[140] Source: audited financial statements

[141] Maine Bureau of Insurance. "Market Snapshot: Small Group." Second quarter, 2005.

[142] Maine Bureau of Insurance. "Market Snapshot: Small Group." Second quarter, 2005.

[143] Maine Bureau of Insurance. "Market Snapshot: Small Group." Second quarter, 2005.

[144] Maine Bureau of Insurance. "Market Snapshot: Small Group." December 6, 2005.

[145] Bowe T. DirigoChoice member Survey: A Snapshot of the Program's Early Adopters. Muskie School of Public Service, University of Southern Maine. August 2005.

[146] Personal communication with David Rousseau, Kaiser Family Foundation.

[147] Enrollment has been closed for the MaineCare Non-Categorical Adult Waiver Program, which is subject to a federal spending limit. Similarly, benefits for this optional, waiver population have been cut back to assist in helping the program operate within federal limits. Other adult members of MaineCare have been subject to more moderate benefit curtailments over the past several budget cycles.

[148] Eligibility for parents of children with MaineCare coverage has been raised to 200% of the poverty limit, to match the eligibility guideline for children.

[149] *See,* for instance, Wennberg DE and Wennberg JE. "Addressing Variations: Is There Hope For The Future?" *Health Affairs Web Exclusive.* W3-614; DOI 10.1377/hlthaff.W3.614. December 10, 2003. *See,* also: Wennberg JE and Cooper MM. *The Dartmouth Atlas of Health Care in the United States.* Dartmouth Medical School, Center for the Evaluative Clinical Sciences. 1996.

[150] Kane N. Maine Hospital Financial Performance: 1993-2002. Presentation to Commission to Study Maine's Community Hospitals, June 21, 2004.

[151] *2005 Almanac of Hospital Financial and Operating indicators.* Ingenix, 2004.

[152] From data presented by the Maine Hospital Association to the Commission to Study Maine's Community Hospitals, January 2004.

[153] *2005 Almanac of Hospital Financial and Operating indicators.* Ingenix, 2004.

[154] *2005 Almanac of Hospital Financial and Operating indicators.* Ingenix, 2004.