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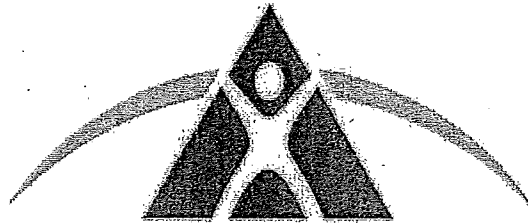
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# **MAINE'S STATE HEALTH PLAN**

ISSUED BY THE

**GOVERNOR'S OFFICE OF HEALTH POLICY & FINANCE**

**JULY 23, 2004**



**DirigoHealth**

*Working For Maine*

July 23, 2004

I am pleased to present the 2004-2005 State Health Plan, launching Maine on our ambitious agenda to make our State the healthiest in the Nation. This plan has been developed with the guidance of the Advisory Council on Health Systems Development, who held a public hearing on the plan, sought guidance from the Maine Quality Forum, and considered public comments in crafting their advice.

The Dirigo Health Reform Act requires a biennial State Health Plan and further states that the first plan is due May 2004. Because the law became effective mid way through a biennium, we propose here a transitional one year plan. The health plan envisioned in the law and by our Office will require extensive research and public engagement which was not possible in the time allowed us since the Advisory Council was sworn-in in mid- January. Thus we have developed and propose here a more modest and transitional first annual plan and set forth a process to engage the State in developing the first biennial plan by next July, 2005.

Working together, Maine's citizens, businesses, and health care providers can achieve Dirigo Health's reform agenda – to restrain cost growth, improve quality, and assure access to coverage for all Maine citizens. The goal is critically important and the tasks to achieve it difficult and complex, but I am confident that Maine will lead the way and find new solutions to help make Maine the healthiest state in our country. This plan presents the first phase of a roadmap for that reform.

Sincerely,  
John Elias Baldacci  
Governor

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# Maine's State Health Plan

Governor's Office of Health Policy & Finance  
July 23, 2004

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## PART 1: INTRODUCTION

### Why a State Health Plan?

*The purpose of the State Health Plan is to strategically improve the allocation and coordination of our health care resources to help Mainers become the healthiest people in the US.*

The State Health Plan sets goals and guidance for Maine and is integrally related to broader social goals. Every Maine citizen needs optimum health to be ready to learn, to work and to enjoy the highest possible quality of life. And health care is a vital part of Maine's economy accounting for a significant part of our gross state product. But the growing cost of health care in recent years both in Maine and across the nation has riveted public attention. Health care spending in Maine in 1998 was an estimated \$5.0 billion, or 15.5% of the gross state product (GSP). By 2004, spending is estimated to increase to \$7.7 billion, or 17.9% of GSP.<sup>1</sup> If left unchecked, health care spending will continue to consume a greater and greater share of Maine's resources and exact an increasingly heavy toll on the budgets of working families and businesses large and small.

This trend mirrors health care spending across the nation. When the World Health Organization (WHO) published its 2000 report on the status of health care around the globe, it rated all countries against a number of parameters including distribution of services, equity in financial contribution, health spending per capita and health outcomes.<sup>2</sup> Those measurements showed the US leading the world in the proportion of GDP devoted to health care at 13.7%. No other nation even approached this level. And, unfortunately, when we look beyond our own borders we can see that we are not getting what we would expect this high level of commitment would earn us – equal access to health care and better health for all.

More spending does not necessarily translate into improved health. Despite our national level of spending on health care, we rank 24<sup>th</sup> in overall health attainment, just above Cyprus.<sup>3</sup> And despite Maine's high level of spending, Maine has high rates of preventable disease. More Mainers smoke, more have and are at risk for heart disease and stroke and more of our citizens have diabetes than in all other New England states.<sup>4</sup> We have the highest rate of childhood asthma in New England<sup>5</sup> and one of the highest adult rates of asthma in the nation.<sup>6</sup> And, while our cancer rates are not the highest, more people die of cancer here than in the rest of New England.<sup>7</sup>

More spending does not necessarily translate into adequate access, either. More than 1 in 8 Mainers under age 65 are uninsured, despite the fact that most in this group work and work full time. Many of Maine's uninsured live at or below 300% of the federal poverty line.<sup>8</sup> Financial barriers result in people delaying needed care until the point where they are so ill that they require costly clinical interventions and have a reduced likelihood of an optimal outcome from that care.

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<sup>1</sup> 1998 estimate from [www.cms.hhs.gov/statistics/nhe/state-estimates-residence/phc-1998.asp](http://www.cms.hhs.gov/statistics/nhe/state-estimates-residence/phc-1998.asp). See Appendix 2 for a detailed discussion of sources and methodology of 2004 estimate.

<sup>2</sup> World Health Organization, *The World Health Report 2000: Health Systems: Improving Performance*. Geneva, Switzerland, 2000.

<sup>3</sup> *ibid*

<sup>4</sup> Kaiser Family Foundation, State Health Facts Online, [www.statehealthfacts.kff.org](http://www.statehealthfacts.kff.org); and National Center for Chronic Disease Prevention and Health Promotion, Behavioral Risk Factor Surveillance System, Center for Disease Control. [www.cdc.org](http://www.cdc.org).

<sup>5</sup> New England Asthma Regional Council. Asthma in New England Part II: Children. January 2004.

<sup>6</sup> New England Asthma Regional Council. Asthma in New England Part I: Adults. May 2003.

<sup>7</sup> American Cancer Society, *Cancer Facts and Figures 2004*. [www.cancer.org](http://www.cancer.org).

<sup>8</sup> Muskie School of Public Service, University of Southern Maine. Data from household survey sponsored by Maine's HRSA planning grant. 2002.

Access means more than simply the means to pay for care, it also refers to physical availability to quality services that are appropriate to a patient's needs and which are able to accommodate the patient in terms of language, culture, and beliefs. . Poor access for some creates problems for all of us; as the costs of that shortcoming are shifted to those who pay for care. Clearly, there is plenty of room for improvement.

Today, Maine has no mechanism to strategically address all aspects of health and health care; we have at best a fragmented health care system. We lack a comprehensive plan to help assure that our health care investments yield improved health and more effective and efficient systems of care. While numerous groups have done excellent work developing and implementing strategies to address individual health issues, no vehicle exists to coordinate these various strategies, to plan for the orderly and economic development of health facilities and resources in the state, and to match the supply of services to specific health needs. Such planning is especially important in an industry in which it has been shown that excess capacity results in unnecessary utilization.<sup>9</sup>

A plan to provide rationality and coordination to a diffused health system can increase the public's health while bringing to health care expenditures a more manageable rate of growth. Lowering the incidence of chronic, preventable diseases can improve health and the capacity of our citizens while also lowering health care expenditures.

## **Statutory Requirements**

In enacting Governor John Baldacci's Dirigo Health Reform Act, the Legislature and the people of Maine acknowledged that the State of Maine needs to enhance the health of all citizens by improving access to care, reducing cost growth and improving quality of care.

P.L. 469 requires the Governor to develop and issue a biennial State Health Plan by May 2004 that "set[s] forth a comprehensive, coordinated approach to the development of health care facilities and resources in the State based on statewide cost, quality and access goals and strategies to ensure access to affordable health care, maintain a rational system of health care and promote the development of the health care workforce."<sup>10</sup>

In developing the plan, the Governor must seek, at a minimum, input from the Advisory Council on Health Systems Development, the Maine Quality Forum, the Maine Quality Forum Advisory Council, a statewide health performance council as well as other agencies. The requirements of the plan are explicated in the law.

The statute requires that "the plan must be used in determining the capital investment fund amount...and... guide the issuance of certificates of need by the State and the health care lending decisions of the Maine Health and Higher Education Facilities Authority. A certificate of need or public financing that affects health care costs may not be provided unless it meets goals and budgets explicitly outlined in the plan."<sup>11</sup>

Finally, the statute requires that the State Health Plan:<sup>12</sup>

- A. "Assess health care cost, quality and access in the State;
- B. "Develop benchmarks to measure cost, quality and access goals and report on progress toward meeting those goals;

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<sup>9</sup> The Maine Medical Assessment Foundation, *Searching for Quality in Medical Care: The MMAF Model*. November 2000.

<sup>10</sup> 2 MRSA c.5, § 103 (1).

<sup>11</sup> 2 MRSA c.5, § 103 (4)

<sup>12</sup> 2 MRSA c.5, § 103 (3)

- C. "Establish and set annual priorities among health care cost, quality and access goals;
- D. "Prioritize the capital investment needs of the health care system in the State within the capital investment fund, established under section 102;
- E. "Outline strategies to:
  - (1) "Promote health systems change;
  - (2) "Address the factors influencing health care cost increases; and
  - (3) "Address the major threats to public health and safety in the State, including, but not limited to, lung disease, diabetes, cancer and heart disease; and
- F. "Provide recommendations to help purchasers and providers make decisions that improve public health and build an affordable, high-quality health care system."

This document represents the first plan to meet these statutory requirements.

## The Case for a One-Year State Health Plan

The State Health Plan we envision is a dynamic and practical blueprint identifying priorities for health resources and building on local initiatives and existing data. A State Health Plan must reflect regional variation and engage the public and stakeholders to truly achieve its goal of improving the public's health, promoting health system change, addressing the factors influencing health care costs and addressing the major threats to public health and safety in the state.

To develop a responsive and responsible State Health Plan requires considerable research and public input. The Advisory Council on Health Systems Development was only officially sworn in on January 16<sup>th</sup> of this year; the Maine Quality Forum just hired its Director this March. The Commission to Study Maine's Hospitals, which will inform the plan, will not make its recommendations until November. The Advisory Council on Health Systems Development has been engaged in deliberation about how best to approach the State Health Plan but has had inadequate resources to complete the task. Thus, the infrastructure was not fully in place to engage in the input required by statute and for planning. However, funds to support external technical assistance have recently been awarded from several sources; and additional staff, time and external technical assistance have been made available.

The law requires that the State Health Plan be a biennial plan yet the first plan is due in May 2004, midway through the biennium. We offer this one year plan to comply with the deadline and to allow us to develop a biennial plan consistent with the state's biennium.

Further the law requires the creation of a Capital Investment Fund as a limit for resources allocated annually under the Certificate of Need program. That fund must be established taking into account the State Health Plan, which necessitates the development of a plan now to help inform the creation of the fund.

A State Health Plan must reflect the responsibilities of and opportunities for both the public and private sector. Further, achieving the goal of becoming the Nation's healthiest state will require significant public input and local engagement. To allow opportunity for this robust public engagement, we will work with the public over the next year to develop the biennial State Health Plan, covering July 1, 2005 to June 30, 2007. Part 3 of this document outlines the process the biennial State Health Plan over the next year.

This document covers the time period from July 1, 2004 to June 30, 2005. It sets more modest objectives – pending the more active engagement of the public that will occur over the next year – by providing guidance primarily for state entities involved in public health, the provision of health services, health care coverage or in the purchase of direct services. Thus, this State Health Plan will explicate procedures to implement cost, quality and access initiatives already enacted by the Dirigo Health Reform P.L. 469 and add explicit tasks to address key public health issues primarily



within the responsibility of state government. It builds on the prevention and health promotion work already being done in the public and private sectors.

The Advisory Council on Health Systems Development (ACHSD) reviewed and commented on a first draft of this plan in mid-May 2004. The ACHSD held a public hearing on a revised draft on June 4, 2004. There was significant public turnout, with 17 individuals presenting verbal testimony. Twenty-five organizations and/or individuals sent written comments on the draft Plan to GOHPF. The ACHSD received additional guidance from the Maine Quality Forum, reviewed all public input and made additional recommendations to GOHPF at its June 15 meeting. GOHPF has integrated public comments and the ACHSD's recommendations into this One-Year Plan.

In this way, GOHPF has met the law's requirement for a May 2004 plan as well as the objectives identified in the law. The transitional plan will also serve as a vehicle to develop a more robust and comprehensive biennial State Health Plan with significant public input during the year.

The planning process over the next year will have five components:

- a baseline of credible, regionalized data on cost, quality, access and health status;
- a regional process through 3 regional workgroups to engage all stakeholders to examine data, set regional goals and benchmarks (see Appendix 1 for map of 3 regions);
- a statewide campaign "Tough Choices" to determine the public's priorities for health and health care;
- a statewide health expenditure target, and
- a state-level synthesis of regional and State Health Plans.

Steps involved in each of these five components -- along with a timeline of specific action items -- are in discussed in greater in Part 3 of this document.

In addition, the strategies and objectives articulated in this One-Year Plan may be refined and added to in the biennial plan, based on both public input and comprehensive data analysis of multiple elements of the health and health care system over the next year. The first biennial State Health Plan will be available by July 2005.

## PART 2: ONE-YEAR STATE HEALTH PLAN

### Section 1: Maine's Major Health Issues

The landmark Dirigo Health Reform Act, enacted last year, set Maine on a course to significantly improve quality and access to health care and bring its cost under control. The law assures that within five years every Maine citizen will have access to affordable health coverage. But coverage alone does not guarantee good health. The law further initiates efforts to bring down the spiral of health care cost growth. But even the best strategies to address the cost of health care cannot succeed unless coupled with efforts to prevent costly care and reduce our reliance on health services whenever possible.

Thus it is a logical extension of Dirigo Health Reform for all of us in the State of Maine to commit to making Maine the healthiest state in the nation. Achieving this goal will require a variety of activities, across every sector and with every citizen of Maine.

Maine and its citizens have already done much to achieve good health, but we can and should set our aspirations higher. We need to assert together that a healthy state means a healthy environment, both for citizens and for business. A healthy state means our health care spending can better be controlled, re-directed to where it is needed most and invested in disease prevention and health promotion, investments that will yield both better health as well as long term savings. And a healthy state means that all of us have an obligation to work for the best health we can achieve, while recognizing that those who need care -- and it could be any of us at any time by chance or accident -- receive the best possible care and support.

Making Maine the healthiest state in the nation is an ambitious goal; it will take time and significant public participation. For this reason we set the goal here, make modest proposals to initiate some action, and intend to make this goal an organizing principle for the first full biennial State Health Plan, described later in this document.

Maine already has many of the attributes of a healthy state. We lead the nation in reducing rates of teen smoking; we have enacted policies to support a clean environment; we are better than national average on rates of teen pregnancy, infant mortality, and immunization of adults age 65 and over; and a study released by UnitedHealth Foundation ranked Maine the 8th healthiest state in 2003.<sup>13</sup>

But Maine is not yet the healthiest state in good part due to our high rates of largely preventable chronic illnesses. In Maine, four leading causes of death -- cardiovascular disease (heart disease and stroke); diabetes; chronic lung disease; and cancer -- account for approximately 70% of Maine deaths each year.<sup>14</sup> These also account for a good deal of the disability experienced by Mainers each year. The burden of morbidity and mortality associated with these conditions totaled almost \$2.5 billion in Maine in 1999.<sup>15</sup>

- *Cancer*

As noted in November 2003 publication released jointly by the United Health Foundation and the American Public Health Association, a high rate of cancer remains one of Maine's primary challenges.<sup>16</sup> In fact, Maine consistently ranks among the 5 states with highest rates of

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<sup>13</sup> UnitedHealth Foundation. *America's Health: State Health Rankings 2003*. November 2003.

<sup>14</sup> Maine Bureau of Health, Department of Human Services. *Healthy Maine 2010: Longer and Healthier Lives*. December 2002.

<sup>15</sup> *ibid*

<sup>16</sup> *op cit* at 13.

cancer mortality.<sup>17</sup> Cancer is the second leading cause of death in Maine, with lung, colorectal, breast and prostate cancer responsible for most of this mortality.<sup>18</sup>

▪ *Cardiovascular Disease*

Cardiovascular disease – the leading cause of death in Maine – accounted for almost 39% of all deaths in this state in 1999; most of these deaths (75%) were attributable to heart disease with the stroke responsible for about 19%.<sup>19</sup> In 2003, Maine ranked 22<sup>nd</sup> in the nation for deaths caused by heart disease, with 249.6 deaths per 100,000 population; this compares to a national rate of 268.7/100,000.<sup>20</sup>

▪ *Lung Disease*

Lung disease is the third leading cause of death in Maine, as it is across the country and the leading killer of children less than one year of age.<sup>21</sup> Maine's death rate from lung disease is higher than that for the nation generally, with the rate in northern, western and eastern Maine exceeding that in the southern region of the state.<sup>22</sup> Asthma is a form of chronic lung disease which affects an estimated 128,000 Mainers, of whom 20% are children.<sup>23</sup> A recent survey conducted by the Asthma Regional Council found that Maine children exhibited the highest rate of asthma in New England at 13.2%.<sup>24</sup>

▪ *Diabetes*

In 2002 68,000 Maine adults had diagnosed diabetes.<sup>25</sup> Maine's rate of adult diabetes – 6.9% – compares relatively favorably with the national rate, which is 8.7%,<sup>26</sup> but is still high. In 2000 Maine's death rate from diabetes was 24.8%, just under the national rate of 25%.<sup>27</sup> Persons with diabetes have an annual risk of death that is twice that of persons without diabetes and suffer from a variety of related conditions including heart disease, blindness and elevated risk of lower extremity amputation.<sup>28</sup>

These chronic conditions, cancer, cardiovascular disease, chronic obstructive lung disease and diabetes are sometimes referred to in shorthand as Maine's "3C's and a D". Importantly, these chronic conditions can very often be prevented. By changing our rate of tobacco use; our level of physical activity; our eating habits; we can control our body mass index cholesterol levels and blood pressure, and thereby reduce the rate of these largely preventable diseases. We note, as well, that the obesity epidemic evidenced in recent years, is a contributing factor to our high rates of certain chronic illnesses. Personal responsibility and prevention, early detection and appropriate intervention are the keys to meeting the challenge of these chronic conditions.

Maine's Bureau of Health, along with a variety of collaborators, has developed plans for addressing many of our chronic illness challenges. These plans include Maine's Comprehensive

<sup>17</sup> *ibid*

<sup>18</sup> Maine Cancer Consortium. *The Maine Comprehensive Cancer Control Plan: 2001-2005*. January 2001.

<sup>19</sup> *A Strategic Plan for Cardiovascular Health in Maine: 2002-2010*. Healthy Maine Partnerships, Maine Cardiovascular Health Program/Department of Human Services, Maine Cardiovascular Health Council. August 2002.

<sup>20</sup> *op cit* at 13.

<sup>21</sup> American Lung Association of Maine website accessed May 11, 2004:

[www.maine-lung.org/learn\\_with\\_us/other\\_lung\\_diseases/other.htm](http://www.maine-lung.org/learn_with_us/other_lung_diseases/other.htm).

<sup>22</sup> American Lung Association of Maine. *RHIME – Respiratory Health Indicators for Maine, Summary Report*. March 2004.

<sup>23</sup> 128,000 estimate derived from (1) Childhood asthma estimates from the Asthma Regional Council, "Asthma in New England, Part II, Children," January, 2004, and (2) Adult asthma estimates from online query of the CDC Website in February, 2004

<sup>24</sup> Asthma Regional Council. *Asthma in New England Part II: Children. Executive Summary*. January 2004.

<sup>25</sup> Kaiser Family Foundation, State Health Facts Online, [www.statehealthfacts.kff.org](http://www.statehealthfacts.kff.org).

<sup>26</sup> Centers for Disease Control and Prevention, US Department of Health and Human Services, website accessed on May 11, 2004 at: [www.cdc.gov/diabetes/pubs/estimates.htm#prev](http://www.cdc.gov/diabetes/pubs/estimates.htm#prev).

<sup>27</sup> *op cit* at 12.

<sup>28</sup> *ibid*

Cancer Control Plan, Maine's Cardiovascular Health Plan, the Maine Diabetes Control Program and Maine's Asthma Plan each address an aspect of the "three Cs and a D." The strategies laid out through these collaborative efforts are comprehensive and represent consensus around how we, as a state, should move forward to improve the health of our population with regard to these chronic disease issues. There is no need to replicate the excellent work that has been done to date; we simply incorporate those plans by reference into this one-year State Health Plan.

#### Mental Illness and Substance Abuse

Mental illness and substance abuse – two independent health issues that sometimes, but not always, coexist – represent a substantial challenge for Maine's population, our providers, payers and policymakers. In 2002 alone, there were more than 11,000 inpatient discharges in Maine for mental illness and disorders with associated charges of almost \$135 million.<sup>29</sup>

Substance abuse is a very serious issue in Maine. The four leading causes of death for Maine's youth – motor vehicle accidents, suicide, homicide and unintentional injuries – all share substance abuse as a common underlying factor.<sup>30</sup> Substance abuse is a contributing factor in all types of domestic violence and is associated with low birth weight, learning disorders and other long term medical issues. In 2000, we spent almost \$620 million each year on both the direct and indirect costs of substance abuse.<sup>31</sup>

Substance abuse is a challenging problem to address and must be approached through multiple avenues including the health care system, the educational system, our corrections and law enforcement systems and our communities. It is also a problem that requires an appropriate and effective prevention strategy, just as do all chronic illnesses (see discussion on the care model later in this paper). Such strategies remain in their development stages, with many identifiable gaps in service.<sup>32</sup>

Maine is currently operating under a court-ordered consent decree for the provision of care to seriously mentally ill individuals. This decree, now in place for fourteen years, is intended to assure that members of this class of Maine residents who are eligible for state public assistance benefits (MaineCare) receive quality health care services designed to meet their needs. Each year, the State spends more than \$250 million on mental health services, a level which has been increasing annually at a startling pace.<sup>33</sup>

Children's mental health service utilization is also growing rapidly. As is the case with adults, the state is acting under the terms of a settlement agreement that drives the levels and types of services provided to mentally ill children in Maine. There is a need to develop appropriate service delivery mechanisms for this population, serving them in a manner that meets their needs and the needs of their families, meeting the expectations of the court while allowing and promoting accountability for the outcomes of treatment. The state, advocates, consumers and providers continue to work to design a service system that meets the goals of the parties involved, but there remains much to be done in this area.

Similarly, it is understood that Maine's corrections system faces significant challenges with regard to the level of mental illness among inmates. A recent study by the Maine Civil Liberties Union documented that 38.5% of prisoners reported having a mental illness while almost 60% reported

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<sup>29</sup> Maine Health Data Organization

<sup>30</sup> State Prevention Plan. Maine Office of Substance Abuse. January 2004.

<sup>31</sup> *ibid*

<sup>32</sup> *ibid*

<sup>33</sup> Personal communication with Brenda Harvey, Acting Commissioner of Maine Behavioral and Developmental Service, May 13, 2004.

a substance abuse problem.<sup>34</sup> Chronic illness also presents itself as a significant problem among the prisoner population with 11% reporting hepatitis C infection and another 1% reporting HIV infection.<sup>35</sup>

The use of hospital emergency departments as a resource for mental health crisis intervention is yet another area of concern. Data show that most face to face contacts for adult mental health crisis are made in an emergency department.<sup>36</sup> There are three mental health regions in Maine and there is variation among the regions with respect to the use of the emergency department (ED) for this purpose (Figure 1).

**Figure 1. Regional Variation in Use of Emergency Department for Adult Mental Health Crisis**

	% of Face to Face Crisis Visits Delivered in Hospital Emergency Department (2003)	% of Face to Face Crisis Visits Delivered at Crisis Office (2003)
Region I	5.13%	11.75%
Region II	17.6%	8.2%
Region III	2.58%	9.4%
Total	6.9%	9.67%

As shown above, there is considerable variability between the regions in the use of the ED for crisis intervention, which is where the majority of such face to face contacts occur; this pattern of use impacts the rate of hospitalization for mental illness. Not unexpectedly, there is also variation among the regions with regard to the delivery of face to face crisis services through the regional crisis offices, running second to EDs in terms of numbers of face to face crisis contacts. This pattern of utilization has significant implications for the quality of services provided, the outcomes of the care provided and the cost of that care. This issue demands close examination to allow us to understand the root causes of these disparate utilization patterns.

Maine's substance abuse treatment system has the capacity to serve approximately 14,000 people.<sup>37</sup> The inventory of health resources discussed at the State Health Plan's objective #14 can help identify both gaps in and duplication of substance abuse services in local areas. Of the population receiving services, almost half (46%) accessed care in the outpatient setting. Of those clients who sought substance abuse services in 2003, 5,567 were diagnosed with a co-occurring disorder of substance abuse *and* mental illness and 1,847 had a current legal status as a member of a court-entitled class. The cost of substance abuse with co-occurring mental health issues is substantial; we must work harder to implement primary, secondary and tertiary prevention strategies to address this issue. As stated in a 2002 report to Congress issued by the federal Substance Abuse and Mental Health Services Administration, [B]etter identifying and treating both the substance abuse disorder and the mental disorder not only improves outcomes, but also appears to be cost effective."<sup>38</sup>

<sup>34</sup> "Substance Abuse, Mental Illness Top Prisoner Complaints." Associated Press; January 6, 2004. Maine News From the AP Wire. <http://news.maine.com/apwire/D7VTF6HQ0-5.shtml>

<sup>35</sup> *ibid*

<sup>36</sup> Maine Department of Behavioral and Developmental Services. Quarterly Contract Performance Indicator Data, FY 2003 Final Report. Unpublished data.

<sup>37</sup> Personal correspondence with Brenda Harvey, Acting Commissioner, BDS; May 26, 2004.

<sup>38</sup> Substance Abuse and Mental Health Services Administration, US Department of Health and Human Services. "Report to Congress on the Prevention and Treatment of Co-Occurring Substance Abuse Disorders and Mental Disorders." 2002

Long Term Care

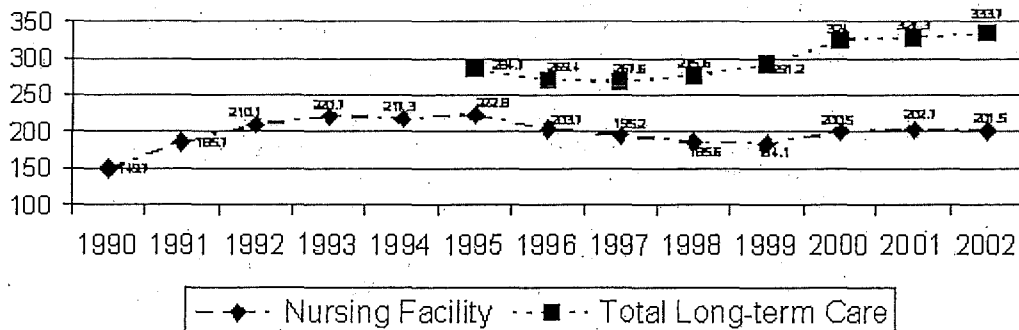
In the 1980's Maine became a national leader in efforts to develop home based care as an alternative to nursing home placement. Awarded one of only 10 major national Federal demonstration grants to "channel" people to home not institutions, enacting Maine's landmark Home Based Care Program and creating congregate care programs, Maine embarked on a reform initiative to provide elders and persons with disabilities a choice in service setting. By 1993, when Maine experienced a serious revenue downturn, that movement took hold when the 116<sup>th</sup> Legislature fashioned a series of policy reforms intended to create a more balanced array of long-term care services. The goal was to reduce reliance on institutional care and offer individuals in need of chronic care more affordable, appropriate choices. The policy changes included:

- Targeting Medicaid nursing home admission to those most in need of this intensive level of care.
- Requiring nursing facilities to use Medicare as first payer.
- Prohibiting changes in nursing home capacity that would add costs to the Medicaid budget without Legislative approval.
- Placing stricter controls on transfer of assets in order to qualify for Medicaid subsidy for nursing home care.
- Developing residential alternatives to nursing homes, including programs specializing in Alzheimer's care.
- Supporting expanded access to state and Medicaid-funded home care services.

Putting the new policies into practice meant the development of more home and community-based services, changes in the design and delivery of state and Medicaid-funded programs, and "growing" the system to meet the need of a large and diverse population of frail, chronically ill older and disabled adults. Figure 2 shows the decline in nursing facility expenditures following implementation of these policies.

Maine is recognized nationally for its success in pre-admission screening, which became mandatory for admission to all long-term care services in 1995, expanding service options, and containing the rate of growth of in long-term care costs. Nursing home stays are shorter, consumers have the opportunity to return home, and many more individuals use residential care, assisted living, home care and adult day services.

**Figure 2. Medicaid Nursing Facility Expenditures and Total Long Term Care Expenditures, 1999-2002 (\$millions)**



Nationally, long term care spending has grown by 53% since 1995. In Maine, Department of Human Services spending has increased 17% over the same period. Maine has achieved this result by using an independent assessment model that matches individuals with the type and

level of services that can meet needs within available resources. Had Maine's costs increased at the national rate, long-term care spending this year would be more than \$100 million higher.<sup>39</sup>

Once the pre-admission assessment became universal for all long-term care services regardless of payment method, the Bureau of Elder and Adult Services began work on data collection. In collaboration with the state Medicaid agency, it developed an automated medical eligibility system (MECARE) to collect and track assessment information. In 2002 16,000 adults received an assessment. Of that total, 12% were under the age of 60. The assessment database, which now includes information on 30,000 adults, is used to identify and compare the demographic and functional characteristics of persons using services, the types and costs of those services, and to analyze the impact of proposed program changes.

The statewide single point of entry has made it possible to consolidate prior authorization for a wide range of programs; make the system more inclusive for young adults and eliminated the conflict between the service provider/advocate role and the gate-keeping function of pre-admission.

The last 10 years resulted in better availability of nursing and residential programs in the aggregate. However, several issues should be addressed. The first is whether programs offer appropriate access regionally. In other words, are they where they are most needed. Data exist which may help predict where both over and under utilization occurs. Nursing and residential programs collect consumer-specific demographic data that can be linked to service areas to determine utilization patterns. This information should be analyzed to determine where services are needed. Certificate of Need would benefit from this in order to more accurately predict whether nursing facilities should be permitted to add more beds in any given location.

Despite progress made during this same timeframe to eliminate outdated facilities, a review of the remaining stock should be undertaken, in a planned way; to see if there are facilities that cannot meet the needs of Maine residents in the future. This may include consideration of facilities with licensing waivers, indicating potential deficiencies that must be addressed. In this fashion, the state can appropriately identify limits and priorities for renovation, replacement or construction of new facilities.

#### *Prevention, Early Detection, Effective Treatment, and Rehabilitation of Chronic Illnesses*

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 initiation of 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.

Over time, we have witnessed huge progress in the battle against acute illness, allowing us to live longer. 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.<sup>40</sup> Patients with chronic illness 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<sup>41</sup> – simply cannot efficiently or effectively meet the needs of those with chronic illness. As Wagner and colleagues

<sup>39</sup> Maine Bureau of Medical Services, Elder & Adult Services.

<sup>40</sup> Institute of Medicine. *Crossing the Quality Chasm: A New Health System for the 21<sup>st</sup> Century*. National Academy Press. Washington DC. 2001.

<sup>41</sup> Wagner EH, Austin BT, Von Korff M. Improving outcomes in chronic illness. *Managed Care Q*. 1996 Spring; 4(2): 12-25.

observe: "[T]rying harder will not work."<sup>42</sup> We must help our system change and evolve to meet the current needs of the population. That evolution – and we must recognize that this change will not occur overnight – involves moving toward a population-based model of chronic care.

The term "chronic care model" may be something of a misnomer. The term is intended to describe a model of care that spans the full spectrum of care, from prevention and early detection, to treatment and rehabilitation. This contrasts with the acute care paradigm, which focuses primarily on treatment. This alternative model recognizes the significant contributions prevention and early detection can make to the overall health of our population as well as to exploiting opportunities for reducing costs.

At the heart of the chronic care model is the notion that the health care system is fully integrated into a community-based model of care organization. Patients and their families are supported to actively participate in an informed manner in their own care and effectively self-manage their conditions. They interact and are supported by practice teams that represent the expertise required to provide clinical and behavioral management. Practice teams are supported by timely access to relevant data about individuals as well as the population of the community they serve. This practical approach allows for the provision of proactive, evidence-based productive interactions with engaged patients who are equipped to make informed decisions regarding their care.

Successfully developing the chronic care model does not mean sacrificing acute care. Obviously, Maine still requires adequate resources to treat acute illnesses and injuries. But we must recognize that we need to begin to reinvest and redirect resources to meet the most pressing needs of our population. To fail to do so would be irresponsible and result in higher costs, poorer quality of care and diminished patient outcomes. There is potentially a significant role for our rural hospitals to assume a leadership role in developing Centers of Excellence in Chronic Care.

### Strategies

As stated earlier, this is a significant and difficult undertaking that will take time to implement. While individual providers and local community groups in Maine are currently engaged in implementing the chronic care model around specific types of chronic illnesses such as diabetes and asthma, we must now lay out a blueprint for moving forward toward this goal in a more concerted and coordinated manner. This one-year plan lays out a map to begin that journey over the coming year.

#### ***Objective 1: Develop strategies to reduce the use of emergency departments for Mainers experiencing a psychiatric crisis***

- GOHPF will lead this effort with the Department of Health and Human Services, assisted by consumers, advocates and providers
- Working group to be established comprising crisis workers and psychiatric hospital providers
- Alternative strategies will be developed based on the needs of the regional population, that meet the standards specified by the courts

#### ***Objective 2: Develop strategies to improve outcomes and reduce costs of treatment of substance abuse and co-occurring disorders***

- Department of Health and Human Services will lead this effort
- Working group convened to identify and promote integrated treatment strategies for patients with mental health and substance abuse disorders and methods to implement them

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<sup>42</sup> Wagner EH, Austin BT, Davis C, Hindmarsh M, Schaefer J, Bonomi A. "Improving Chronic Illness Care: Translating Evidence Into Action." *Health Affairs*. 20;(6): 64-78.



- GOHPF will provide the necessary support to the implementation of the State Prevention Plan developed by the Office of Substance Abuse, with particular attention to the development of preventive strategies
- GOHPF will coordinate a working group on substance abuse issues that cut across departments of state government, building on collaboration already underway between the Office of Substance Abuse and the Department of Education; the Department of Corrections will also have a closer involvement in this process

***Objective 3: Convene a Governor's Working Group on the Health System and the Prevention, Early Detection, Effective Treatment, and Rehabilitation of Chronic Illnesses***

- GOHPF to lead effort, with support from Maine Quality Forum
- Working group members to include GOHPF; MQF; public health representatives; higher education; Department of Health and Human Services (including OSA and BEAS); Corrections; consumers; providers; and payers
- Small working group assigned with task of drafting a report to Governor on moving systematically toward the comprehensive care model to be submitted by March 1, 2005
- Work group members to attend Chronic Care Congress, September 2004
- Establish separate subgroup to stimulate discussions on a broad basis regarding the goal of promoting "healthy aging" in Maine and the interaction between healthy aging and an effective care model

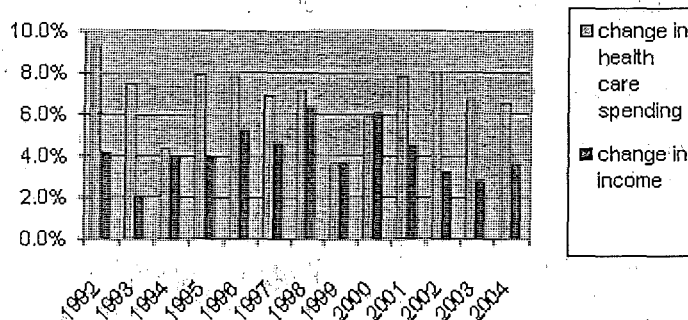
## Section 2: Cost

The Dirigo Reform Initiative was enacted in part because the people and businesses of Maine felt that the cost of health care has become increasingly unaffordable in recent years. Between 1991 and 1998 (the last year for which 50-state estimates are available), Maine's per capita health care spending increased *faster than all other states in the nation*, at an average rate of 7.3% between 1991 and 1998. The average rates of growth for New England and the nation over this same time period were 5.5% and 4.9% respectively. Because of Maine's fast rate of increase, Maine went from being 31<sup>st</sup> highest in per capita health care spending in 1991 to 11<sup>th</sup> highest in 1998.<sup>43</sup>

But comparing the rate of health care spending by the size of the population is a gross measure and does not address the affordability of that cost growth. The "affordability" of health care spending can be assessed in a variety of ways. One way is to look at changes in health care spending alongside changes in personal income.

Healthcare spending is growing faster than our ability to pay for it. Figure 3 shows the percentage change in estimated health care spending in Maine alongside the percentage change in personal income in Maine each year from 1992 to 2004. As Figure 3 shows, growth in health care spending exceeded growth in income in all but two of these 13 years, with health care spending increasing by an average of 6.9% per year, while income increased by only 4.2% per year. The overall result of these increases is that between 1991 and 2004, personal health care spending has increased 137%, while income has increased by only 70%.<sup>44</sup>

Figure 3. Annual Percentage Change in Maine's Health Care Spending and Personal Income



Between 1991 and 2004, personal health care spending has increased 137%, while income has increased by only 70%.<sup>44</sup>

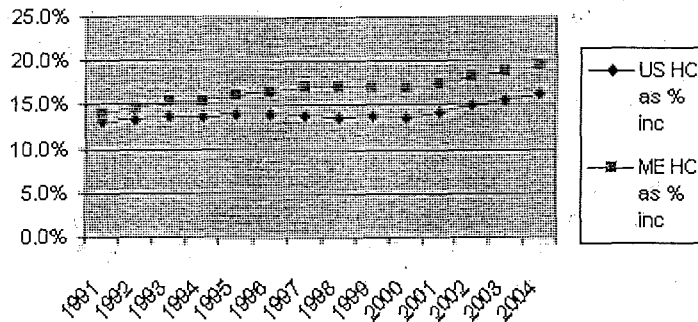
When looking at a slightly different measure -- health care spending as share of personal income -- Maine ranks 6th highest in the nation. Looking at health care spending as a share of income is a useful measure for assessing the affordability of health care spending, because when families spend more of their income on health care, they have less available for non-health care spending. Figure 4, which shows health care spending as a percentage of personal income for both Maine and the US, shows that both have faced increases in health care spending as share of personal income, but that Maine has continually spent more of its income on health care than the rest of

<sup>43</sup> [www.cms.hhs.gov/statistics/nhe/state-estimates-residence/us-per-capita10.asp](http://www.cms.hhs.gov/statistics/nhe/state-estimates-residence/us-per-capita10.asp)

<sup>44</sup> Amounts reflect actual changes in current year dollars, without adjustments for inflation. See Appendix 2 for a detailed discussion of sources and methodology.

the country, increasing from 14% in 1991 to almost 20% in 2004, compared to national shares of 13% and 16% respectively.

Figure 4. Maine & US Health Care Spending as a Percentage of Personal Income

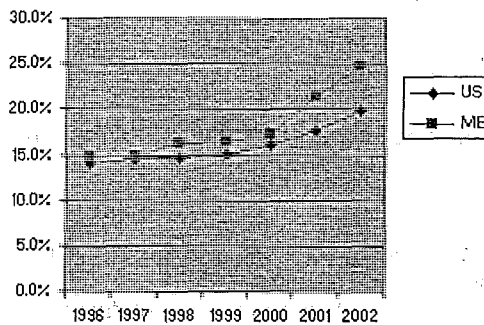


**Mainers spend more of their income on healthcare than people in the rest of the US.**

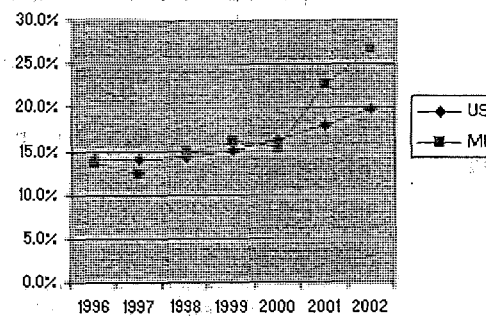
Because higher health care spending drives higher health care premiums, Maine families have seen their premiums go up faster than their income. Between 1996 and 2002, the cost of a family policy for Maine businesses and employees increased by 77%, while median household income increased by only 6%; increases for small businesses have been even steeper.<sup>45</sup> Figures 5 & 6 show the average total cost of a family policy as a percentage of median household income during the period 1996 through 2002 for both Maine and the US. As can be seen in those charts, premiums as a share of income have been increasing both nationally and in Maine, but the percentage is greater in Maine. Increases in 2001 and 2002 have been particularly steep in Maine.

Figures 5 & 6. Maine & US Family Premiums as % of Median Household Income<sup>45</sup>

Maine & US Family Premiums as % of Median Household Income, all employers



Maine & US Family Premiums as % of Median Household Income, employers with fewer than 50 employees



**Maine businesses and their employees spend more on health premiums than their peers in other states. Between 1996 and 2002, the cost of a family policy for Maine businesses and employees increased by 77%, while median household income increased by only 6%; increases for small businesses have been even steeper.<sup>45</sup>**

<sup>45</sup> Amounts reflects actual changes in current year dollars, without adjustments for inflation. See Appendix 2 for a detailed discussion of sources and methodology.

Looking at total health care spending in the context of the entire economy is another way to assess health care spending levels. Health care spending as a percentage of the gross state product (GSP) increased from 15.5% in 1998 (\$5.0 billion spent on health care out of a \$37.5 billion economy) to an estimated 17.0% of GSP by 2002, and to 17.9% in 2004 (\$7.7 billion spent on health care out of the \$43.0 billion economy (see third to last row of Figure 7).

Answering the question "what share of income and the economy should be constituted by health care spending" is not an easy task. While it is true that health care plays a crucial role in our state's economy, health care is not an export business – it is primarily provided and paid here by Maine businesses and taxpayers.<sup>46</sup> As health care costs grow, the cost of doing business in Maine grows, inhibiting the growth of existing business and the entry of new business, and diverting resources otherwise available for economic investment – all factors necessary to achieve the balance and economic diversity necessary for a thriving economy.

There are a number of benchmarks against which we can compare our spending. National health care spending is expected to comprise 15.5% of the Gross National Product in 2004,<sup>47</sup> 2.4 percentage points lower than Maine's spending of 17.9% of Gross State Product on health care; and, as mentioned above, national health care spending as a percentage of income is also several percentage points lower than in Maine.

Whether these national rates are appropriate benchmarks is also in question, as other developed nations spend far less on health care than the U.S. and achieve better health outcomes. A recent article in the journal *Health Affairs* found that among the 29 non-US countries belonging to the Organization for Economic Cooperation and Development (OECD) the median percentage of GDP spent on health care in 2001 was only 8.3%.<sup>48</sup> While the United States' higher spending might result in more advanced technology and shorter waiting time to see a specialist, there is a wide body of research suggesting that higher spending does not result in commensurately better health outcomes.<sup>49</sup> For instance, as mentioned in the introduction, when the World Health Organization (WHO) published its 2000 report on the status of health care around the globe, it

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<sup>46</sup> Medicare and Medicaid bring in Federal tax dollars. In FFY 2000, \$1.32 in Federal money was spent in Maine for every \$1 in Federal taxes paid by Maine residents (Kaiser Family Foundation, State Health Facts Online, [www.statehealthfacts.kff.org](http://www.statehealthfacts.kff.org)).

<sup>47</sup> Centers for Medicare & Medicaid Services (CMS). "National Health Expenditures and Selected Economic Indicators, Levels and Average Annual Percent Change: Selected Calendar Years 1990-2013." [www.cms.hhs.gov/statistics/nhe/projections-2003/t1.asp](http://www.cms.hhs.gov/statistics/nhe/projections-2003/t1.asp)

<sup>48</sup> 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.

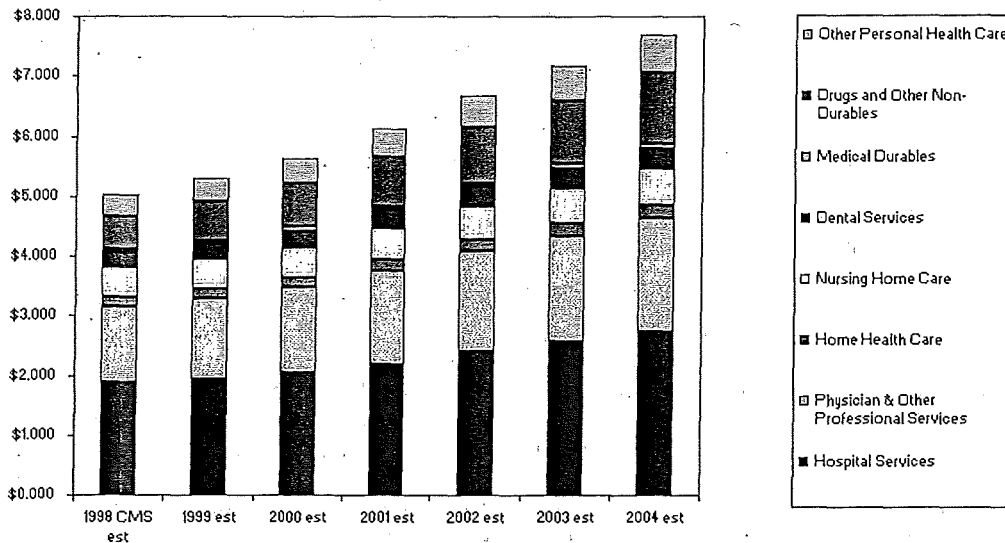
<sup>49</sup> Peter S. Hussey, Gerard F. Anderson, Robin Osborn, Colin Feek, Vivienne McLaughlin, John Millar and Arnold Epstein. "How Does The Quality Of Care Compare In Five Countries?" *Health Affairs*, Vol 23, Issue 3, 89-99.

**Figure 7. Estimated Statewide Health Expenditure Report, 1999 to 2004\***

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%	\$2.037	7.5%	
Physician & Other Professional Services	\$1.270	5.2%	\$1.336	7.0%	\$1.430	8.7%	
Home Health Care	\$0.187	-3.7%	\$0.180	-1.8%	\$0.177	6.2%	
Nursing Home Care	\$0.482	0.5%	\$0.484	4.7%	\$0.507	5.7%	
Dental Services	\$0.240	6.1%	\$0.255	7.7%	\$0.274	8.0%	
Medical Durables	\$0.060	2.3%	\$0.061	3.0%	\$0.063	2.3%	
Drugs and Other Non-Durables	\$0.559	16.2%	\$0.650	13.1%	\$0.735	12.8%	
Other Personal Health Care	\$0.343	11.7%	\$0.383	9.0%	\$0.418	11.3%	
<b>TOTAL (\$billions)</b>	<b>\$5.008</b>	<b>5.6%</b>	<b>\$5.290</b>	<b>6.6%</b>	<b>\$5.640</b>	<b>8.5%</b>	
<b>Gross State Product (\$billions)</b>	<b>\$32.210</b>	<b>5.9%</b>	<b>\$34.100</b>	<b>6.4%</b>	<b>\$36.280</b>	<b>3.2%</b>	
<b>% of GSP</b>	<b>15.5%</b>		<b>15.5%</b>		<b>15.5%</b>		
<b>Population</b>	<b>1,260,053</b>	<b>0.6%</b>	<b>1,268,097</b>	<b>0.8%</b>	<b>1,278,244</b>	<b>0.6%</b>	
<b>Per Capita Personal Health Care Spending (\$)</b>	<b>\$3,974</b>	<b>5.0%</b>	<b>\$4,171</b>	<b>5.8%</b>	<b>\$4,413</b>	<b>7.9%</b>	
	<b>2001 est</b>	<b>Nat'l Chg 01-02</b>	<b>2002 est</b>	<b>Nat'l Chg 02-03</b>	<b>2003 est</b>	<b>Nat'l Chg 03-04</b>	<b>2004 est</b>
Hospital Services	\$2.190	9.5%	\$2.398	6.5%	\$2.553	6.5%	\$2.719
Physician & Other Professional Services	\$1.554	7.7%	\$1.675	6.7%	\$1.786	6.5%	\$1.902
Home Health Care	\$0.188	7.2%	\$0.201	5.9%	\$0.213	6.1%	\$0.226
Nursing Home Care	\$0.536	4.1%	\$0.558	3.7%	\$0.579	4.4%	\$0.604
Dental Services	\$0.296	7.2%	\$0.318	5.2%	\$0.334	5.4%	\$0.352
Medical Durables	\$0.065	3.3%	\$0.067	4.6%	\$0.070	4.9%	\$0.073
Drugs and Other Non-Durables	\$0.829	13.0%	\$0.936	12.2%	\$1.050	12.2%	\$1.178
Other Personal Health Care	\$0.465	12.1%	\$0.521	10.8%	\$0.577	10.7%	\$0.639
<b>TOTAL (\$billions)</b>	<b>\$6.122</b>	<b>9.0%</b>	<b>\$6.673</b>	<b>7.3%</b>	<b>\$7.163</b>	<b>7.4%</b>	<b>\$7.695</b>
<b>Gross State Product (\$billions)</b>	<b>\$37.450</b>	<b>4.6%</b>	<b>\$39.190</b>	<b>4.0%</b>	<b>\$40.740</b>	<b>5.4%</b>	<b>\$42.950</b>
<b>% of GSP</b>	<b>16.3%</b>		<b>17.0%</b>		<b>17.6%</b>		<b>17.9%</b>
<b>Population</b>	<b>1,286,000</b>	<b>0.8%</b>	<b>1,296,364</b>	<b>0.6%</b>	<b>1,304,000</b>	<b>0.8%</b>	<b>1,315,000</b>
<b>Per Capita Personal Health Care Spending (\$)</b>	<b>\$4,760</b>	<b>8.1%</b>	<b>\$5,147</b>	<b>6.7%</b>	<b>\$5,493</b>	<b>6.5%</b>	<b>\$5,851</b>

\* Includes spending on personal health services only; does not include spending on health insurance premiums and insurance payer administration. See Appendix 3 for category definitions. See Appendix 2 for a detailed discussion of sources and methodology.

Figure 8. Estimated Statewide Health Expenditure Report, 1999 to 2004<sup>50</sup>



found that despite the United States' having the highest level of spending on health care in the world, we rank only 24<sup>th</sup> in overall health attainment.<sup>51</sup>

The bottom line is that – whatever benchmarks we use – it is clear that there are significant resources in the system already that can be redirected towards health while curbing the rate of growth and helping economy.

The statewide Touch Choices campaign that will be conducted over the next year (discussed in parts one and three of this document) will ask the citizens of Maine to articulate what share of their income and Maine's economy they believe is appropriate, based on a thorough evaluation of the costs and benefits of different levels of spending. The campaign will also ask Mainers how to allocate resources to achieve the maximum benefit within whatever levels of spending they believe is appropriate.

In the meantime, it is useful to look at the drivers of health care spending to help in assessing how to use our health care dollars more effectively – curbing the rate of spending growth, purchasing better health, increasing access, and improving the quality of care.

#### Health Care Cost Drivers.

It is possible to group the four primary drivers of health care costs in our state as follows:

- High Rates of Costly Chronic Conditions
- High Rates of Uninsurance
- Inappropriate Utilization of Services, Excess Capacity, and Other Inefficiencies in Delivery of Services
- Pharmaceuticals

<sup>50</sup> See Appendix 2 for a detailed discussion of sources and methodology.

<sup>51</sup> World Health Organization, The World Health Report 2000: Health Systems: Improving Performance. Geneva, Switzerland, 2000.

The extent to which Maine's older population drives health care spending has been overstated. Maine is older than the rest of the nation; in the 2000 Census the median age in Maine was 38.6 years, whereas the nation's median age was 35.3 years. It is true that health care expenditures on behalf of an elderly person will be higher than those on behalf of a younger person; this is due primarily to the cost of care provided in the final weeks and months of a person's life, as well as the cost of nursing facility services.

However, there is significant evidence that the burden of disability – a cost driver in that it necessitates additional services – is, in fact, declining among the elderly and rising in the non-elderly population; this closing of the elderly/non-elderly disability gap in effect lessens the relatively higher per person/point in time costs of caring for elder versus younger persons.<sup>52</sup>

Second, there is a difference between (a) age-specific health care use and costs (i.e., comparing spending for one elderly individual and one younger individual) and (b) overall costs attributable to the aging of the population. Namely, the aging of the population simply occurs so slowly as to result in little overall impact on total health care spending. Studies estimate that the aging of the population will perhaps contribute between 0.4% and 0.5% health care spending between 2000 and 2030<sup>53</sup> – certainly not a major driver of the rapid rise in health care costs.

**High Rates of Costly Chronic Conditions.** As mentioned earlier in the State Health Plan high rates of costly chronic conditions, many of them caused by our personal behaviors, also contribute to cost. More Mainers smoke and have a higher rate of diabetes than all other New England states.<sup>54</sup> In 2003, Maine ranked 22<sup>nd</sup> in the nation for deaths caused by heart disease, with 249.6 deaths per 100,000 population; while lower than the national rate of 268.7/100,000 this is still a significant health and expenditure factor, and being ranked 22<sup>nd</sup>, Maine still has significant room for improvement.<sup>55</sup> And, as mentioned earlier, while our cancer rates are not the highest, more people die of cancer here than in the rest of northern New England.<sup>56</sup>

**High Rates of Uninsurance.** The fact that a substantial portion of our population – approximately 13% – is uninsured, contributes to our cost problem. Maine ranks 1st in New England in the number of uninsured citizens. The uninsured tend to be more costly to the health care system because they are likely to receive less preventive care and are diagnosed at more advanced disease stages. In 2002 Maine's hospitals reported an estimated \$123 million in bad debt and \$68 million in charity care costs that are shifted to other premium payers,<sup>57</sup> who then pay claims off of inflated charges. Physicians experience similar rates of bad debt and charity care.

**Inappropriate Utilization of Services, Excess Capacity, and Other Inefficiencies in Delivery of Services.** Total healthcare spending can be viewed as a function of two variables: (a) cost per unit, and (b) utilization patterns and the number of units consumed. Any effort to assess healthcare spending would be incomplete without looking at each of these variables for the areas of healthcare spending that comprise the greatest share of total spending.

Hospital spending and physician and other professional services are the two largest areas of health care spending, consistently comprising over one-third and one-quarter of health care spending, respectively (see Figure 8). Because these two combined make up over 60% of all health care spending, it is worth looking at whether (a) the funds we spend in hospitals and

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<sup>52</sup> Reinhardt U. Does the Aging of the Population Really Drive the Demand for Health Care? *Health Affairs*. 22(6):27-39.

<sup>53</sup> *ibid*

<sup>54</sup> Kaiser Family Foundation, State Health Facts Online, [www.statehealthfacts.kff.org](http://www.statehealthfacts.kff.org).

<sup>55</sup> *op cit* at 13.

<sup>56</sup> American Cancer Society. *Cancer Facts and Figures 2004*.

<sup>57</sup> Maine Health Data Organization, 5/13/04

physician offices are spent as efficiently as possible, and (b) utilization patterns are appropriate for the population's health needs.

Spending on Hospital Services. A number of studies have shown that Maine has high quality hospitals. Most recently, a 2003 report issued by the Centers for Medicare and Medicaid Services ranked Maine hospitals third in the nation – just behind New Hampshire and Vermont – in 2000-2001 on 22 quality indicators for care provided to Medicare patients.<sup>58</sup>

One might reasonably expect that if the quality of care ranks behind that of our neighbors, so, too, would our spending on hospital care. However, this is not the case, as a variety of measures suggest that the efficiency of spending in Maine's hospitals has room for improvement – that Maine's hospitals should be able to provide the same quality of care at a lower cost. For instance, Maine's hospitals had an average cost per-discharge 26% higher than New Hampshire's (data are not available for Vermont) and 45% higher than the northeast region's.<sup>59</sup>

Because there has been a significant shift in the treatment of patients from the inpatient to the outpatient setting in recent years – in 1998 the median percentage of revenue from inpatient and outpatient services among Maine's hospitals were 55.4% and 45.5%, respectively; by 2001 those numbers had changed to 49.4% and 49.3%<sup>60</sup> – and because the cost of inpatient and outpatient treatments can vary significantly, it is useful to look at the cost of Maine's hospitals' performance benchmarked against other states' hospitals for inpatient and outpatient separately.

Inpatient Costs. As can be seen in Figure 9 (see next page), of the 39 states for which data are available, Maine had the 6th highest cost per wage- and case-mix-adjusted discharge in the US in 2002 (the most recent year for which data are available), at \$6,917 per discharge. This is 19% higher than the national average of \$5,819 and 45% higher than the Northeast region average of \$4,759.<sup>61</sup>

Cost per adjusted discharge is the best single measure of inpatient hospital costs because it reflects hospital spending per discharge *after* controlling for the effects of differences between states in (1) labor costs and (2) patients' severity of illness (due to factors such as age, co-occurring illnesses, or complications). The source for these data is The 2004 Almanac of Hospital Financial & Operating Indicators, 2004, a compendium of data from the American Hospital Association.

Inpatient Utilization. Maine's inpatient utilization patterns are also substantial drivers of our health care costs. Our hospital utilization rates are higher than the rest of New England, and only Massachusetts exceeds our rate of admissions.<sup>62</sup> In 1999, for example, Maine's admission rate was 30 percent higher than New Hampshire's and 35 percent higher than Vermont's. Maine has the highest number of inpatient hospital days/1,000 in New England, the most surgeries/1,000 and a significantly higher number of emergency department visits/1,000.<sup>63</sup>

National research has shown that the supply of hospital beds is the factor that most strongly predicts hospitalization rates for medical conditions,<sup>64</sup> so it is likely that Maine's high rate of hospital utilization is driven at least in part by the fact that we have the most beds per 1,000 citizens in New England. In addition, in 2000, Maine's rate of emergency room use was 43 percent higher than the national average and substantially higher than either New Hampshire's or

<sup>58</sup> Jenks SF, Huff ED, Cuerdon T. "Change in the Quality of Care Delivered to Medicare Beneficiaries 1998-1999 to 2000-2001. JAMA. 2003; 289: 305-312.

<sup>59</sup> *op cit* at 59.

<sup>60</sup> *ibid*

<sup>61</sup> *ibid*

<sup>62</sup> Hospital Statistics 2003. Health Forum LLC, Affiliate of American Hospital Association. 2003

<sup>63</sup> *ibid*

<sup>64</sup> Wennberg JE, Cooper MM, eds. The Dartmouth Atlas of Health Care in the United States. The Center for Clinical and Evaluative Studies. Dartmouth Medical School. AHA Press, 1996. Chicago, IL.



Vermont's. This statistic suggests that many Mainers are using the emergency room to obtain primary care services, which is neither the most cost-effective nor the highest quality source of primary health care services. It is also a form of primary health care delivery that Maine is unlikely to be able to sustain.

**Figure 9. 2002 Cost Per Adjusted Inpatient Discharge, by State**

Rank	State	CPAD	Rank	State	CPAD
1	Louisiana	\$7,525	21	Oregon	\$5,880
2	Kansas	\$7,427	22	Kentucky	\$5,832
3	South Carolina	\$7,016	23	Utah	\$5,798
4	New Jersey	\$7,013	24	North Carolina	\$5,763
5	California	\$6,973	25	Connecticut	\$5,760
6	<b>Maine</b>	<b>\$6,917</b>	26	Florida	\$5,748
7	Missouri	\$6,871	27	West Virginia	\$5,717
8	Colorado	\$6,769	28	Virginia	\$5,673
9	Montana	\$6,762	29	Georgia	\$5,651
10	Texas	\$6,605	30	Washington	\$5,583
11	Oklahoma	\$6,572	31	Tennessee	\$5,519
12	Nebraska	\$6,466	32	Ohio	\$5,505
13	Illinois	\$6,445	33	New Hampshire	\$5,483
14	Arkansas	\$6,293	34	Michigan	\$5,325
15	Indiana	\$6,210	35	Rhode Island	\$5,274
16	Wisconsin	\$6,079	36	Maryland	\$5,249
17	Minnesota	\$6,016	37	New York	\$4,968
18	Iowa	\$5,952	38	Pennsylvania	\$4,504
19	Arizona	\$5,933	39	Massachusetts	\$3,679
20	Alabama	\$5,905			

Outpatient Costs. While there is a range of standardized inpatient data available to facilitate inter- and intra-state comparisons of inpatient costs, the same is not true for outpatient data. There are a number of reasons for the lack of standardized outpatient data, the foremost of which is that, whereas a discharge represents a discreet unit of inpatient service -- the costs of which can be compared once adjustments for severity have been made -- there is no comparable unit of outpatient service, as one outpatient "visit" may generate separate claims for several different services and different medical problems.

In the absence of such data, a dataset that could be somewhat useful as a proxy for outpatient costs is Medicare outpatient data. Whether these data reflect the cost of providing of outpatient care to all patients cannot necessarily be inferred from these data since the non-Medicare population is younger and requires different treatment from the Medicare population.

Figure 10 shows how Maine's hospitals compare to hospitals nationally, as well as those in New Hampshire, Vermont, and Massachusetts, and in West Virginia, North Dakota, and Wyoming (the states included as benchmarks in the Blue Ribbon Commission's report,<sup>65</sup> due to the State Planning Office's having identified those states as similar to Maine in demographic and income

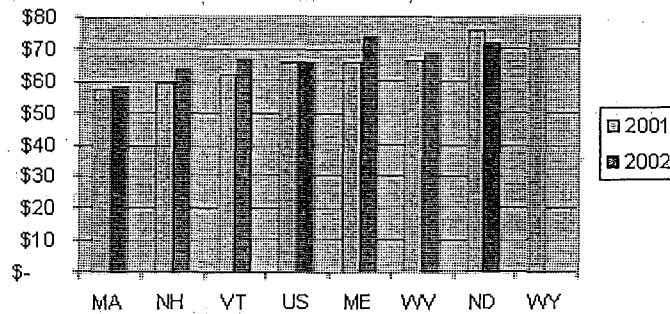
<sup>65</sup> "The Cost of Health Care in Maine: An analysis of health care costs, factors that contribute to rising costs, and some potential approaches to stabilize costs. Report of the Year 2000 Blue Ribbon Commission on Health Care to Governor Angus S. King, Jr." November, 2000.

characteristics).<sup>66</sup> The data presented are from Cleverley and Associates, a firm that consults with hospitals nationally on improving hospital financial performance.

Cleverley and Associates uses Ambulatory Payment Classification (APC) Groups -- used by Medicare since August 2000 as a basis for outpatient hospital reimbursement -- to calculate a "hospital's average Medicare cost per APC" for comparison purposes. As with the inpatient data presented above, the costs reported are *after* controlling for the effects of differences between states in (1) labor costs and (2) patients' severity of illness.

The figure shows that in 2001, Maine hospitals' median average outpatient Medicare cost of \$66 per APC was roughly 10% higher than our New England neighbors, equal to the national median and West Virginia, and 10% lower than North Dakota, and Wyoming's for hospitals included in the study.<sup>67</sup> In 2002, Maine's average outpatient Medicare cost of \$74 was 12% higher than the national median, 28%, 16%, and 10% higher than Massachusetts, New Hampshire, and Vermont, respectively, and 7% and 3% higher than West Virginia and North Dakota (2002 data not available for Wyoming).

Figure 10. 2001 and 2002 Average Medicare Cost Per Adjusted Outpatient APC



It is encouraging that in 2001 Maine's median average outpatient Medicare costs were on par with the national average. The increase in 2002, however, could be cause for concern. It will be valuable to observe 2003 data to see if Maine's median continues to increase beyond the benchmarks in this chart.

Outpatient Utilization. In 1996, *The Dartmouth Atlas of Health Care* reported that only one other New England state exceeds our use of outpatient visits and surgeries.<sup>68</sup> And, as mentioned earlier, there has been a significant shift in recent years in the treatment of patients from the inpatient to outpatient setting. The development of the Maine Health Data Organization's all payor database later this year (see page 34) will enable analysis of both costs and whether utilization is appropriate given the population's health needs.

Spending on Physician/Health Care Professionals' Services. Each year, Mainers spend a significant proportion of their health care dollars on physician services. As mentioned earlier,

<sup>66</sup> Maine's inpatient cost per adjusted discharge (discussed in the previous section) is 21% higher than West Virginia's; data are not available for North Dakota and Wyoming.

<sup>67</sup> US medians from, Cleverley and Associates 2001 and 2002 "Hospital Dashboard Reports," available through [www.cleverleyassociates.com](http://www.cleverleyassociates.com). State specific data from a report compiled by Cleverley and Associates for the University of Maine Muskie School of Public Service, 2004. Maine's Critical Access Hospitals (hospitals w 15 or fewer beds in 2001 and 2002) are not included. Fewer hospitals are included in the 2002 data than the 2001 data. The number of hospitals for each state 2001/2002 are as follows: Maine 28/31; North Dakota 15/33; West Virginia 39/47; Vermont 11/13; New Hampshire 19/23; Massachusetts 63/66; Wyoming 24/0.

<sup>68</sup> *op cit* at 64.

approximately 25% of Maine's total health care costs comprise payments to physicians and other health care professionals.

While physician payments are not the leading category of expenditures, physicians are key to determining the use of other health care resources. Hospital services, for example, are generally ordered by physicians, as are most ancillary services, many allied professional services and prescription drugs. We understand that patient demand and expectations play an important role in the services provided and perceptions about medical malpractice may likewise affect practice behavior. Nevertheless, it is the medical professional who must order the service; simply put, the patient cannot access many services without the cooperation of the physician.

In Maine, as in all other areas of the country, there are marked variations in physician practice patterns, utilization and outcomes of medical services. These variations are evident at the community level and studies have demonstrated that they are not explained by differences in population or patient demographics or in differences in the medical conditions presented in these areas. They are instead primarily associated with two factors: the supply of medical resources in the area and the training and practice patterns of the physicians practicing there.<sup>69</sup> As Wennberg and colleagues aptly state, in health care "geography is destiny."<sup>70</sup> A male Medicare patient living in one area of Maine may experience an almost seven-fold difference in his risk of having his benign prostatic hyperplasia treated surgically with a transurethral resection than a male of the same age and with the same severity of disease living in another area of the state.<sup>71</sup>

There are certain conditions that do not vary markedly across regions. These are generally conditions for which there is broad consensus among practitioners regarding appropriate approaches to treatment. For instance, a patient experiencing a heart attack will generally receive the same basic care regardless of where in Maine that care is delivered. Similarly, the care of a patient with a broken hip will be largely the same whether that patient lives in York or Presque Isle.

However, there are many conditions – dubbed high variation medical conditions – for which there is far less agreement regarding the best approach to treatment. That is where a physician's training and local resources come into play and are reflected in the preferences for surgery over medical management, the use of certain diagnostic tests, hospitalization as opposed to ambulatory care. The choices reflected in local practice patterns impact the outcomes of care experienced by patients as well as the costs of care associated with each local area.

***Objective 4: Work to ensure the appropriateness and quality of care by identifying variations in practice patterns, utilization of services and outcomes of care.***

- The Maine Quality Forum will lead the initiative to identify variations, working with providers and payers to develop proposals for reducing differences in practice patterns across the state
- MQF will work with related entities to disseminate information regarding evidence-based "best practices"

*Pharmaceuticals.* While hospital services comprise the largest single category of health care expenditures, spending on prescription drugs has received the most attention in the popular media, calling the public's attention to the matter. While prescription drugs are the third largest single category of health care costs, the rate at which those costs have been growing is the reason for concern. That rate of increase has far outstripped increases in the cost of hospital care, the cost of physician and other professional services, long term care or any other category

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<sup>69</sup> *op cit* at 64.

<sup>70</sup> Wennberg JE, Cooper MM, eds. *The Dartmouth Atlas of Health Care in the New England States*. The Center for Clinical and Evaluative Studies. Dartmouth Medical School. AHA Press, 1996. Chicago, IL.

<sup>71</sup> *op cit* at 64.

of expenditure and has been running roughly 1.5 to 2 times the overall rate of increase in total health spending since 2000. This means it is a fast growing component of health care costs. Pharmaceutical manufactures, unlike hospitals and practitioners, are not subject to stringent state regulation or planning initiatives.

Utilization of retail prescriptions has been on the rise nationally, rising from 7.3 per capita in 1992 to 10.8 per capita in 2000<sup>72</sup> with the average cost of a prescription increasing 48% in that same period.<sup>73</sup> Although innovation in pharmaceuticals has helped treat and cure many serious illnesses, some cite the surge in direct to consumer advertising – not medical necessity – as a driving force behind the upswing in use. A national survey of physicians found that doctors believe such advertising leads to patients seeking unnecessary treatments<sup>74</sup> and, hence, increases in spending.<sup>75</sup> Others point to the insulation of the patient from the actual cost of the drug through insurance as a significant reason for increased demand for – and spending on – prescription drugs. And criticism of the pharmaceutical industry itself, charging profiteering, is a well articulated view of many as the underlying reason for the high cost of drugs in this country. This variety of views contrasts with our expectation as a society that the pharmaceutical industry will help “rescue” us from life threatening illnesses or wipe away the impact of unhealthy lifestyle easily and effectively.<sup>76</sup>

A more academic analysis of the factors contributing to high drug costs is a bit more complex. Undoubtedly, the factors outlined above play a role in the equation, but there are others to be considered, such as our patent laws and regulations (which set up temporary monopoly situations), the importance of investments on Wall Street and the cost/revenue structures of the drug companies, and the international communities’ restrictions on drug pricing. We want and need our pharmaceutical industry to be solvent and vibrant, but we do not want to support their practice of price discrimination – charging different prices for their product to different buying segments based on their price sensitivity.

Other developed nations have universal health care systems and negotiate drug prices; in the US’ market-based health system, pharmaceutical companies enjoy greater capacity to set prices. In other words, for classes of drugs where there is great demand and little or no competition, prices are set at high levels, because the market will bear such an action. However, this action results in the most vulnerable people (those who are ill – and we know that the poor and uninsured bear the greatest burden of illness) paying the highest drug costs.

Drug companies do have programs to assist those challenged in their ability to afford necessary medications to receive their products. These programs have tended to be relatively limited, however, and their future would seem to be uncertain in tough economic times. Recent changes in the Medicare program were designed to relieve some price pressure for seniors, who tend to use multiple prescription drugs, which heretofore have not been covered at all by that public program. The Medicare initiative follows on aggressive state initiatives designed to make drugs more affordable for residents. Maine has been a national leader in this regard, with its Maine Rx Plus and Drugs for the Elderly initiatives.

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<sup>72</sup> Batchlor E, Laouri M. Pharmaceutical Promotion, Advertising, and Consumers. *Health Affairs Web Exclusive*. W3-109. 2003.

<sup>73</sup> *ibid*

<sup>74</sup> Weissman JS, Blumenthal D, Silk AJ, Newman M, Zapert K, Leitman R, Feibelmann. Physicians Report On patient Encounters Involving Direct-To-Consumer Advertising. *Health Affairs Web Exclusive*, 10.1377/hlthaff.w4.219. 2004.

<sup>75</sup> *op cit* at 72.

<sup>76</sup> Reinhardt U. Perspectives on the Pharmaceutical Industry. *Health Affairs*. 20(5):136-149.

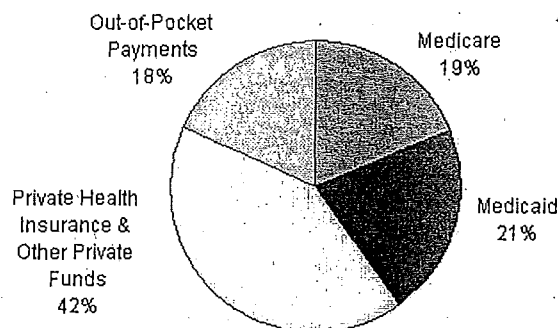
**Objective 5: Continue Maine's historic work to ensure our citizens have access to needed pharmaceuticals at reasonable and affordable prices.**

- MaineCare will continue to explore strategies to maximize purchasing power
- Public purchasers will consider bulk purchasing strategies and/or employ joint cost containment strategies
- MQF will participate in efforts to educate the public regarding the role drugs may play in the treatment of certain conditions (e.g. Save Antibiotic Strength initiative)

Who Pays For Care?

We all do. As seen in the Figure 11, which shows the estimated share of Maine's healthcare spending paid by the major payors of healthcare (the federal Medicare program, the state-federal Medicaid partnership, private insurers, and individuals in the form of out-of-pocket payments), the public sector pays for roughly 40% and the private sector for 60% of care. However, these payments are ultimately borne by the citizens and businesses of Maine – especially true since health care payments made by insurance companies are financed by premiums paid by businesses and individuals.

**Figure 11. Estimated Share of Health Care Payments by Major Payor Group, 1998<sup>77</sup>**



Clearly, controlling our health care costs is a substantial challenge, the difficulty of which cannot be discounted. Still, if we are to nurture an environment that contributes to a healthy economic climate in this state, that will help attract and nurture businesses and that will enhance the quality of life of Maine residents, we must squarely face this task. Important steps toward this goal were taken with the enactment of the Dirigo Health Reform Act in 2004; we continue to pursue that goal with this Plan.

<sup>77</sup> Uses CMS's estimate for share of Maine's 1998 Medicare and Medicaid spending ([www.cms.hhs.gov/statistics/nhe/state-estimates-residence/medicare-aggregate10.asp](http://www.cms.hhs.gov/statistics/nhe/state-estimates-residence/medicare-aggregate10.asp), [www.cms.hhs.gov/statistics/nhe/state-estimates-residence/medicaid-aggregate10.asp](http://www.cms.hhs.gov/statistics/nhe/state-estimates-residence/medicaid-aggregate10.asp)). Since CMS does not make state estimates of private insurance and out-of-pocket payments, we allocated the remaining amount of Maine's 1998 spending between private insurers and out-of-pocket payments using CMS's ratio of private insurance and out-of-pocket payments in 1998 nationally ([www.cms.hhs.gov/statistics/nhe/historical/t4.asp](http://www.cms.hhs.gov/statistics/nhe/historical/t4.asp)). The development of the Maine Health Data Organization all payor database (see discussion later in this section) later this year will enable an update of these 1998 numbers.

**Objective 6: Provide Guidance for Determining the Level of Future Investment in Health Care Services, the Issuance of Certificates of Need and Related Lending Decisions**

2 MRSA c. 5, §103 (4) describes the uses of the State Health Plan, specifying the Plan be used in determining the level of the Capital Investment Fund (CIF),<sup>78</sup> in guiding the issuance of Certificate of Need awards by the state and the lending decisions of the Maine Health and Higher Education Facilities Authority. The purpose of this section of the State Health Plan is to set out that guidance.

The statute calls for the consideration of the average age of infrastructure in development of the CIF. The data available to us on this topic are restricted to hospitals; no comparable data (in the public domain) are available for the health care system as a whole. Average age of plant indicates the relative age, in years, of hospitals' fixed assets – bricks and mortar. A lower average age implies a newer fixed asset base and a lesser need for replacement in the near term.

According to *The 2004 Almanac of Hospital Financial & Operating Indicators*,<sup>79</sup> the average age of plant in Maine in 2002 was 9.85 years, as shown in Figure 12. Of 43 states for which data are available, Maine ranks 20<sup>th</sup> in terms of average age of plant. 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.

**Figure 12. Comparison of Average Age of Plant, 1998-2002**

State	1998	1999	2000	2001	2002
Maine	8.68	9.50	9.71	9.77	9.85
New Hampshire	9.25	7.55	8.28	8.21	7.89
Vermont	8.75	8.92	9.62	9.73	9.92
Massachusetts	10.34	10.34	9.6	9.58	9.67
Connecticut	9.02	9.49	9.49	10.54	10.22
New Jersey	9.66	9.63	9.99	10.59	11.01
New York	10.99	19.48	10.16	11.62	11.79
Pennsylvania	10.30	10.48	10.40	10.88	11.50
Rhode Island	10.93	9.12	9.91	10.33	11.47
Northeast <sup>80</sup>	9.85	9.95	9.82	10.18	10.83
Rural Hospitals	9.45	9.45	9.71	9.87	9.98
All	9.26	9.22	9.39	9.56	9.77

Using *Almanac* data from both 1998-1999 and 2004 editions it is possible to chart the change in age of plant in Maine, the Northeast and the US (Figure 13). The data graphed here present the 25<sup>th</sup>, 50<sup>th</sup> and 75<sup>th</sup> percentiles for average age of plant in Maine, over time, as compared to the 50<sup>th</sup> percentile for the Northeast and the US. The 50<sup>th</sup> percentile for Maine has consistently tracked that of the nation and has been closely tracking the age of plant for the Northeast. Importantly, the *Ingenix* data, which are used here to demonstrate age of plant, are derived from a national survey of 3000 hospitals, and represents the most robust data set of its kind. Conversely, Moody's age of plant data are drawn from a sample of approximately 350 hospitals across the country, all of which have more than 4000 admissions annually and most having more than 100 beds.<sup>81</sup> Regardless, the values shown for the US are not substantially different from the median age of plant values published by the Healthcare Financial Management Association in November 2002, citing to ratios prepared by Moody's (9.3 years), S&P (9.4 years), FITCH (9.5

<sup>78</sup> The Capital Investment Fund (CIF) is an annual cap on the level of CON awards, as established by 2 MRSA c. 5, §102.

<sup>79</sup> *op cit* at 59.

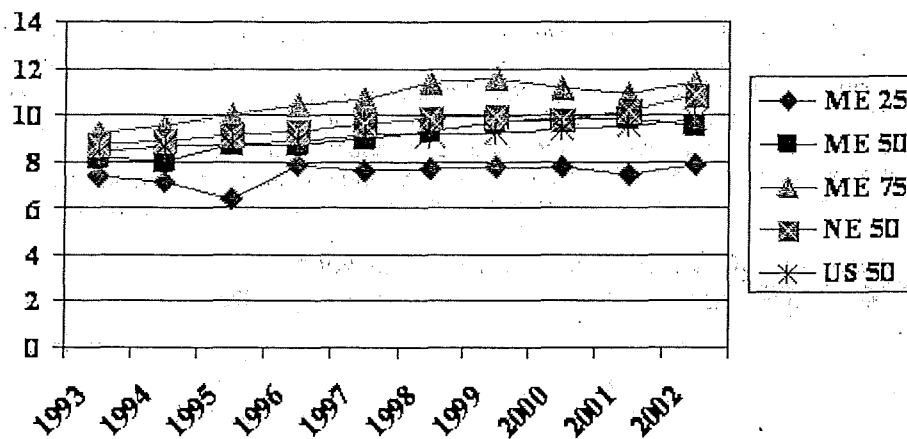
<sup>80</sup> Northeast includes ME, NH, VT, MA, NY, NJ, RI, CT and PA.

<sup>81</sup> Personal communication with Lisa Martin, Moody's, July 13, 2004.

years), Data Advantage (9.4 years),<sup>82</sup> Simply put, on the whole, the average age of plant in Maine is relatively young.

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. Data from the Maine Hospital Association taken from hospital financial income statements<sup>83</sup> 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 9.77 years and, in the Northeast, 10.83 years.<sup>84</sup> 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.

Figure 13: Comparison of Average Age of Plant by Percentile, Maine, Northeast and US<sup>85</sup>



*The Almanac* provides several other interesting benchmarks for consideration. One such measure is the dollar value of capital costs per discharge, adjusted for differences in wage rates and case mix. 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 outpaced Massachusetts in this measure, as it has the Northeastern region and rural hospitals, generally. While capital costs per adjusted discharge for the nation as a whole is steady, Maine has caught up (\$452.25 in 2001) and has now surpassed the national performance standard (\$423.28 in 2001).

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. Data for Maine and benchmarks are shown below in Figure 14. With the exception of New Hampshire and Rhode Island, Maine hospitals lead other New England states, the Northeast, rural hospitals and the US with regard to this measure.<sup>86</sup> This implies that we are investing in hospital capital at a faster rate than is generally observed in the benchmark areas.

<sup>82</sup> [www.hfma.org/resource/focus\\_areas/business\\_of\\_hcrelevant\\_statistics/11\\_13\\_2003](http://www.hfma.org/resource/focus_areas/business_of_hcrelevant_statistics/11_13_2003), forwarded by Tony Marple, MaineGeneral Medical Center, July 1, 2004.

<sup>83</sup> From data presented by the Maine Hospital Association to the Commission to Study Maine's Community Hospitals, January 2004.

<sup>84</sup> *op cit* at 59.

<sup>85</sup> Kane N. Maine Hospital Financial Performance: 1993-2002. Presentation to Commission to Study Maine's Community Hospitals, June 21, 2004.

<sup>86</sup> *op cit* at 59.

These data provide little evidence that we should accelerate our rate of investment in facilities at the present time, although there will almost certainly be instances where renovation, replacement and, in some circumstances, new construction might be required and/or desirable. In fact, as discussed earlier in this section, because Maine's overall health care costs are high relative to other parts of the nation, we argue that we should slow our rate of capital investment or focus investment in projects that result in a decrease in operating costs.

**Figure 14. Capital Expenditure Growth Rates (%)**

State	1998	1999	2000	2001	2002
Maine	7.5	8.4	11.0	8.0	6.9
New Hampshire	8.3	8.6	5.3	8.8	7.3
Vermont	7.9	6.7	6.0	6.3	6.5
Massachusetts	6.2	6.0	5.5	4.7	6.3
Connecticut	8.9	6.3	4.3	3.8	4.6
New Jersey	6.1	6.1	4.0	4.7	5.3
New York	6.5	6.2	4.7	3.9	4.4
Pennsylvania	5.9	5.8	5.7	4.9	6.0
Rhode Island	4.9	6.9	6.7	5.8	9.9
Northeast	6.3	6.4	5.5	5.5	5.5
Rural Hospitals	6.6	6.6	6.1	6.1	5.7
All	7.0	7.1	6.4	6.3	6.2

### Strategies

In evaluating and prioritizing projects submitted in accordance with Maine's CON statute, the Department of Health and Human Services should be guided by these important criteria. Insofar as the statutes 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 must 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.<sup>87</sup> We must therefore, strive to maximize the utility of this planning tool in order that the largest capital projects (those subject to CON rules) are subjected to rigorous review for adherence to planning principles, assisting in the orderly development of a high quality health care system for Maine.

***Objective 7: Strengthen Maine's Certificate of Need Program by setting out criteria for prioritizing projects that are submitted for review and approval.***

As noted above, one function of the State Health Plan is to set forth criteria to allow for the prioritization of applications submitted to the Certificate of Need Program for review and approval. The CON Program has rules that govern the manner in which the application review process is conducted. It is our expectation that those rules will be amended to reflect both the recent changes in the law governing Certificate of Need and either by specific incorporation or by reference, the guidance provided in this Plan.

In addition to the criteria listed below, the Plan urges the CON program to include in its rules a requirement that all CON applications include a statement of how the project will meet at least

<sup>87</sup> *op cit* at 85.



one of the priorities specified in the State Health Plan, as well as a proposed plan for evaluating and documenting the extent to which the project has met those goals over time. Approval would be contingent upon the applicant and the CON Unit reaching agreement on an evaluation plan, and the CON Unit would conduct follow-up to ensure that those goals are met. Failure to meet stated goals could affect the assessment of future CON applications made by the same applicant and/or could be enforced as a condition of retaining licensure status and eligibility for third party payments, which are at jeopardy if CON conditions are not satisfied.

The Governor's Office will work with DHHS throughout the reorganization and budgeting process to be certain the CON unit is appropriately and fully staffed in order that it is able to effectively and efficiently carry out its responsibilities.

Finally, because the majority of capital expenditures are *not* subject to CON review – and thus would not be guided by the cost, quality, and access criteria articulated below – the Governor's Office and the CON program will examine the possibility of recommending that the Legislature lower the capital and operating thresholds that trigger a CON review.

#### Priorities

The priorities described below are organized into several groups of related criteria. While every project will not meet each and every criterion, the revised CON rules should include uniform measures to determine projects' costs and benefits, as well as some mechanism by which to assess applications' merit when judged against one another within the context of the Capital Investment Fund. For instance, by weighting the criteria and assigning point values for performance on each criteria, a total score for each project could be determined. Similarly, the Department could give the highest priority and consideration to those projects meeting the greatest number of criteria in any of the relevant priority groupings.

Importantly, we assume that all projects proposed for CON review are intended by the applicants to contribute positively to patient care. However, this does not mean that all projects are equally worthy or equally supportable in light of stringent economic constraints. The priorities set out below are intended to promote the orderly and efficient development of Maine's health care delivery system, so as to maximize the benefits offered by that system.

*A. Projects that protect public health and safety- The safety of the patients and the public, generally, is of utmost importance. Therefore, projects undertaken to protect and promote public health and safety should be given highest priority in an environment where there are limited resources to invest in the health care system. These types of projects include:*

- Projects with the primary objective of eliminating threats to patient safety,
- Projects that incorporate comprehensive disease detection, treatment and rehabilitation, that show evidence of leading to decreases in inappropriate utilization, and other evidence-based strategies to reduce the impact of such chronic illness as cardiovascular disease, cancer, asthma, chronic lung disease, diabetes and mental illness, furthering the goal of moving our health care system toward the chronic care model.
- Projects that reflect a redirection of resources and focus on population-based health and prevention. Such projects will allow us to move toward our goal of shifting resources toward areas of greatest need which is for prevention and care of the chronically ill.
- Projects that demonstrate best practices in building construction, renovation and operation to minimize environmental impact both internally and externally (e.g. "green" energy).

*B. Projects that contribute to lower costs of care and greater efficiencies – In our current environment, where our level of spending on health care is unsustainable given our economic constraints, projects that truly will generate cost savings either through increased operational efficiencies or through strategies that will lead to lower demand of high cost services in the short and long run should be given very high priority. These types of projects include:*

- Projects that will reduce future demand for health care services
- Projects that result in reduced operating costs for existing facilities.
- Projects that physically consolidate hospitals or services that serve all or part of the same area 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,<sup>88</sup> do not contribute to sprawl.
- Telemedicine projects that facilitate improvements and cost-efficiencies in the quality of diagnosis and treatment in smaller, rural communities.

*C. Projects that advance access to services and reflect a collaborative, evidence-based strategy for introducing new services and technologies –In times of economic constraint, we must be cognizant of the impact the introduction of new services and/or technologies will have on the cost of care in Maine. This new capacity may carry many promises – convenience for patients in terms of proximity to services, for example, or enhanced diagnostic and treatment capabilities – but the promise of decreased costs is not one of those promises. This type of investment historically has not led to lowered spending. Instead, it often results in duplication of capacity, in an increased demand for service even though some of the services provided may have the effect of prolonging life. Unlimited technological advances are unaffordable at the present time. We must approach the question of introducing new services without emotion and with careful, analytic consideration. This is not to say that Maine should categorically resist the adoption of innovation; such a move would be ill-advised. However, we must apply strict standards to determine in which innovations to invest. Criteria for such assessment are reflected in the priorities below.*

- Projects that make the best use of existing capacity/infrastructure in initiatives focused on expanding access to ambulatory or primary care services.
- Projects introducing new technology or services will only be considered if evidence is provided showing detailed analysis of peer reviewed research and data supporting the technology and need and clearly detailing the impact of the project on health care spending in Maine over the short, medium and long term time horizons. Projects must be recommended by the Maine Quality Forum and documented evidence of collaboration exists to assure shared use of new resources across the state, rather than proliferation and/or duplication of new technology.

*In addition, high priority will be assigned to applicants able to demonstrate the following:*

- Applicants demonstrating adequate evidence of good faith efforts in meeting the voluntary price and cost targets established by the Dirigo Health Reform Act, PL 469.
- Applicants demonstrating investment in and/or use of an electronic medical records system with an HL7 interface, allowing for exchange of information. This priority assignment will be available to any applicant, regardless of the project applied for. The policy rationale underlying this priority assignment is our desire to encourage implementation of the infrastructure necessary to facilitate integrated clinical information systems. Such systems will serve to improve the quality of care and, ultimately, reduce the cost of care.

*Projects that involve any of the following characteristics cannot be considered priority projects during this time of constrained economic resources and already high health care spending:*

- Projects that duplicate existing services or facilities in a region or community that has existing capacity for such services. This limitation assists in the orderly development of the health care system and in our efforts to control costs.

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<sup>88</sup> 30-A MRSA c. 187, § 4312(3)(a) states that "it is in the best interests of the State to...encourage orderly growth and development in appropriate areas of each community and region while protecting the State's rural character, making efficient use of public services and preventing development sprawl."

- Projects that result in an increase in the number of inpatient beds in the state. Maine has 3 licensed beds per 1000 population,<sup>89</sup> as compared to 2.9 beds/1000 for the US, 2.8/1000 in Vermont, 2.6/1000 in Massachusetts and 2.3/1000 in Connecticut, New Hampshire and Rhode Island.<sup>90</sup> Putting additional beds on-line, without a complementary reduction in beds elsewhere will infuse additional costs into the system.
- Projects that involve the construction of a new hospital (other than replacement facilities). Maine's population has adequate access to hospital-based services at the present time. The introduction of new hospitals into our system would add substantial cost and would not serve the public's best interest.
- Projects that involve major expansions of existing services and/or facilities. Until such time as meaningful public input regarding the future of our health care system may be obtained, investment in such investment – and the added costs that attend them – is premature.

**Objective 8: Establish Statewide Health Expenditure Targets for Maine**

P.L. 469 requires the Governor, as part of State Health Planning activities, to issue an annual statewide health expenditure budget report to serve as the basis for establishing priorities within the plan. For the One-Year State Health Plan we have included a report of expenditures based on the estimates of the federal Center for Medicare and Medicaid Services (CMS) (see Figure 7; Figure 7 is *not* a budget target for 2004, and the categories shown in that Table do not necessarily reflect the categories that will be used in upcoming budget reports; rather, Figure 7 is an estimate of 2004 spending, based on CMS's 1998 estimates).

For the Biennial State Health Plan and future plans we envision the creation of a more rigorous report, reflecting comprehensive analysis and regional input that can serve as a statewide expenditure target. The expenditure target will not be a regulatory device that restricts payments to providers. We propose a more collaborative structure that includes streamlining and standardizing payment methods and reporting systems across payers and that engages citizens and regional workgroups in debating and deciding funding priorities. Because payment will (a) remain fragmented among multiple parties, and (b) not be limited by a regulatory device, staying within the limits of a statewide expenditure target will be a considerable challenge. However, the transparency and analysis inherent in the planning and budgeting process will allow communities and purchasers of healthcare – from individuals to small and large business – to have a voice in determining how their health care dollars can most effectively be spent.

The primary data source to create the target and to monitor actual spending will be the Maine Health Data Organization's (MHDO) state-wide all-payor database, which will enable the detailed analysis of healthcare spending necessary for thoughtful and comprehensive state health planning. By the end of calendar year 2004, MHDO plans to have finished acquiring and incorporating into this database calendar year (CY) 2003 payments made by Medicaid, Medicare, and private payers, and possibly from the Federal Employees Health Benefit Program, Tricare, and the Veterans Administration. The database will provide information on how much is being spent where and by whom on what services. The database will include such elements as: diagnosis, procedure, type of facility and zip code of patients and providers<sup>91</sup> and will therefore provide comparative data across sectors and regions. CY2003 data will provide the baseline data for the first statewide expenditure report, against which future spending will be measured.

In addition, we envision health system targets developed by regions and that include five key budget categories: institutional, ambulatory, chronic care, community and public health and capital. These targets can be developed based on an evaluation of whether current expenditures

<sup>89</sup> Maine Department of Human Services, Bureau of Health. *Maine Health 2001/2002: A Health Planning Resource*, 2002 and Kaiser Family Foundation State Health Facts Online: 50 State Comparisons. Accessed at Kaiser Family Foundation, State Health Facts Online, [www.statehealthfacts.kff.org](http://www.statehealthfacts.kff.org).

<sup>90</sup> *ibid*

<sup>91</sup> All patient level data is protected from unauthorized disclosure.

meet the goals of regional and state health plans . These targets can also provide greater detail than that provided in Table 1 by, for instance, showing how hospital spending breaks into inpatient versus outpatient services.

Importantly, building the target on MHDO data will avoid the pitfall of “building into the base” any inefficiencies that existed in prior years’ spending. The richness of MHDO data will be sufficient to assess the extent to which the breakdown of a region’s baseline spending is appropriately targeted to its population’s health needs. Thus, inefficiencies – or gaps between needs and the actual breakdown of spending – can be identified in the baseline year, desired changes for future years’ spending can be targeted. Subsequent years’ data can be analyzed to assess the extent to which spending should be further altered to meet the changing needs of populations, as those needs are articulated and prioritized through the planning process each biennium.

Developing a statewide expenditure target is a significant and complex undertaking. Experiences from other countries provide little meaningful guidance since their payment systems generally differ from ours. Several state and regional approaches have been attempted (Vermont; Minnesota; Rochester, NY) and lessons from those experiences must be analyzed.

#### Strategies

- Governor convenes a representative work group on the statewide expenditure target to conduct research and propose an approach for Maine. July 2004
- Initiate with Public Purchasers’ Steering Group standardized approaches across payers to pay hospitals (e.g.: DRGs, ASC, pay for performance). July 2004
- Invite private purchasers and insurers to join the payment standardization initiative. July 2004
- GOHPF convenes inter-agency task force to include DHHS, Education, Corrections, DAFS, Labor, Dirigo Health Agency to develop a biennial budget that supports the State Health Plan and the projected expenditure target September 2004
- Review experiences of other jurisdictions in U.S. and abroad with global or statewide expenditure targets. October 2004
- Finalize report on standardized payment methodologies. January 2005
- Propose to Advisory Council on Health System Development a methodology to create a statewide expenditure target. January 2005
- Assess compliance of insurers, hospitals and other providers in meeting voluntary cost targets. February 2005
- Integrate into target planning information obtained from inventory of public health expenditures (see objective#14). March 2004
- Finalize statewide expenditure target for 2005. April/May 2005
- Complete and implement plan to convert public purchasers to DRG reimbursement April 2005

#### **Objective 9: Promote the Concept of Paying for Performance (PFP) to Public Purchasers**

Unfortunately, in the current context of our payment system, providing the highest quality of care often does not pay well. Capitation has long been accused by critics of creating perverse incentives for providers, encouraging them to minimize their financial risk by under-providing care. Under-provision carries risks for the patient and costs for the system. Fee for service is also compromised in its ability to incentivize the provision of optimal treatment.<sup>92</sup> This type of payment

<sup>92</sup> Rosenthal MB, Fernandopulle R, Song HR, Landon B. Paying for quality: providers’ incentives for quality improvement. *Health Affairs*. 23(2):127-141.

can encourage costly over-provision of care; it is well-documented that in health care more is usually not better.<sup>93</sup> It is rare that providers are paid for quality improvement activities, and, when such activities take away time from practice, such participation can actually serve to decrease a provider's revenues.

Market theorists argue that patients will simply walk away from a provider that delivers poor quality care. This view fuels the publication of health care report cards, accreditation, and the proliferation of health information on the Internet. It is also one of the forces behind the burgeoning of consumer driven health plans, shifting financial risk to patients partially in the hopes of encouraging them to make more careful decisions when selecting providers. An excellent example of this strategy is the Maine Health Management Coalition's website that allows the public access to quality benchmarking data for Maine providers.

While tools to provide consumers with information designed to support informed choices are an excellent start, it is unlikely that this strategy alone will be sufficiently successful to ensure improvements in the quality of care – and hence improvement in the appropriateness of costs – especially in a rural state like Maine, where it is difficult to “vote” with one's feet. We must actively consider supplementing these efforts with strategies to incentivize the providers, through construction of appropriate payment mechanisms, to provide optimal care.

Strategies GOHPF will work with and support the Public Purchasers' Steering Group in exploring opportunities to build pay for performance (PFP) into health care paid for with public monies. The Steering Group is comprised of representatives of MaineCare, the State Employees Health Insurance Program, Maine Municipal Association, the University system, Maine School Management Association, the Maine Education Association, GOHPF, the Dirigo Health Agency, and the Legislature's Appropriation's Committee.

- GOHPF consults with Steering Group regarding its current PFP activities and coordinates to prepare a background & options paper on what else the Steering Group might do regarding pay for performance to. Paper will take into consideration the effect that Public Purchasers' shifting to PFP could have in terms of cost-shifting to private payers. September 2004
- Steering Group considers background paper October 2004
- Steering Group considers background paper reviews findings with Coalition to assure no cost shifting and to encourage public/private collaboration on implementing PFP. November 2004
- Implementation of test strategies May 2005

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<sup>93</sup> Hussey PS, Anderson GR, Osborn R, Feek C, McLaughlin V, Millar J, Epstein A. How does the quality of care compare in five countries? *Health Affairs*. 23(3): 89-99.

### Section 3: Quality

The Institute of Medicine defines health care quality as: “*The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.*”<sup>94</sup> By most accounts, a majority of Mainers already enjoy high quality health care services. In fact, a 2003 report issued by the Centers for Medicare and Medicaid Services ranked Maine hospitals third in the nation – just behind New Hampshire and Vermont – in 2000-2001 on 22 quality indicators for care provided to Medicare patients.<sup>95</sup> Similarly, Maine has been ranked one of the healthiest states in the nation by the United Health Foundation, working in partnership with the American Public Health Association and the Partnership for Prevention. In this assessment, Maine ranks 8<sup>th</sup> in the nation in terms of overall health.<sup>96</sup> Importantly, these high quality marks must be balanced against variable outcomes of care, as discussed later in this section.

Most of Maine’s non-specialty hospitals are submitting quality data to CMS through one of a variety of channels including Maine’s Quality Improvement Organization or the American Hospital Association.<sup>97</sup> Our tertiary medical centers have each voluntarily participated in the Leapfrog Group’s hospital patient safety survey, scoring well in each of the three focus areas of the study:<sup>98</sup> high risk treatments/procedures; ICU physician staffing (use of intensivists) and computer physician order entry systems. Each of the major insurers selling coverage in Maine enjoys an accreditation outcome of “excellent” by the National Committee on Quality Assessment.<sup>99</sup>

Maine providers have a long history of working toward quality improvement. This state was a laboratory for the earliest work on small area variations and outcomes research, spurring on the growth in such analyses at the national level. We are also fortunate to have one of the most robust health care data bases in the country available to help us understand our health care system and how it is working.

The federal Agency for Healthcare Research and Quality recently released a set of quality indicators for selected conditions, based on data from the Healthcare Cost and Utilization Project, known as HCUP. State estimates are drawn from state inpatient databases;<sup>100</sup> Maine benchmarked against the nation is shown in the table on the following page. While we perform well with regard to admissions for diabetes, asthma and congestive heart failure, our rate of adult admissions for chronic obstructive lung disease, angina and immunization-preventable pneumonia in the elderly are substantially higher than the norm.

A 1999 report released by the Institute of Medicine found that nearly 100,000 people die each year in the US as the result of a preventable medical error.<sup>101</sup> The Rand Corporation recently released a national report card on the quality of care in the US.<sup>102</sup> The report notes that, overall, little more than one-half of all adults receive recommended care, be it chronic, acute or preventive in nature. The report also cites that the quality of care provided across conditions varies substantially. Moreover, the lead author of the study has stated that although US patients spend

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<sup>94</sup> Institute of Medicine of the National Academies. [www.iom.edu/focuson.asp?id=8089](http://www.iom.edu/focuson.asp?id=8089) accessed May 10, 2004.

<sup>95</sup> *op cit* at 58.

<sup>96</sup> *op cit* at 13.

<sup>97</sup> Personal communication, Sandy Parker, Maine Hospital Association. Notably, six of Maine’s eight critical access hospitals, all of which are very small and provide limited services, do not report such data.

<sup>98</sup> [www.leapfroggroup.org](http://www.leapfroggroup.org)

<sup>99</sup> National Committee for Quality Assessment. Accessed on line, May 10, 2004 at:

<http://hprc.ncqa.org/frameset.asp>

<sup>100</sup> Unpublished data, AHRQ.

<sup>101</sup> Institute of Medicine of the National Academies. *To Err is Human: Building a Safer Health System*. National Academy Press, Washington DC. 1999.

<sup>102</sup> Rand Corporation. *The First National Report Card on Quality of Health Care in America*. Research Brief. 2004.

more for health care than citizens of other industrialized nations, we often do not receive adequate care.<sup>103</sup>

The benchmarks shown in Table 4 present only one approach for assessing Maine's performance. These relate only to the US, and only to the national performance measure as opposed to the highest performance measure observed nationwide. It might be more useful to consider adopting benchmarks from other industrialized nations, or to use the "best" performance attained nationally, in order to more appropriately set our sites for achieving our vision of becoming the healthiest state. Moreover, these benchmarks employ hospital utilization measures as a proxy; we must also consider health status indicators such as rates of tobacco use, obesity and so on, if we are to fairly assess our progress.

**Table 4. Maine Versus U.S., Select HCUP Quality Measures**

Condition	Adjusted Rate per 100,000 <sup>104</sup> , 2001	
	National Benchmark	Maine
Adult admissions for diabetes with short term complications <sup>105</sup>	52.367	39.892 <sup>†</sup>
Adult admission for diabetes with long term complications <sup>106</sup>	117.098	104.357 <sup>†</sup>
Adult admissions for uncontrolled diabetes without complications	26.822	10.693 <sup>†</sup>
Lower extremity amputations for adults with diabetes <sup>107</sup>	38.724	41.416
Adult asthma admissions <sup>108</sup>	112.842	81.981 <sup>†</sup>
Pediatric asthma admissions	188.601	106.210 <sup>†</sup>
Adult admissions for COPD <sup>109</sup>	257.445	297.980 <sup>†</sup>
Adult admissions for CHF <sup>110</sup>	494.972	410.285 <sup>†</sup>
Adult admissions for angina <sup>111</sup>	58.694	82.185 <sup>†</sup>
Immunization-preventable pneumococcal pneumonia admissions for elderly, age 65+ <sup>112</sup>	79.426	115.852 <sup>†</sup>
Immunization-preventable influenza admissions for elderly, age 65+ <sup>113</sup>	13.357	15.117

Shaded values indicate areas where Maine performance may need improvement.

<sup>†</sup> p < .05. This means that the value shown for Maine is statistically different from that shown for the US, that is, the difference between the two values is not due to chance.

Maine is not immune from that epidemic. There are also considerable variations across this state in the utilization of certain procedures and treatments for the same medical condition. For example, the rates of transurethral resection of the prostate (TURP) for benign prostatic

<sup>103</sup> Connolly C. "U.S. Patients Spend More but Don't Get More, Study Finds Even in Advantaged Areas, Americans Often Receive Inadequate Health Care." *Washington Post*, May 5, 2004.

<sup>104</sup> Adjusted for age and gender

<sup>105</sup> Excludes OB admissions and transfers from other facilities

<sup>106</sup> Excludes OB admissions and transfers from other facilities

<sup>107</sup> Excludes trauma, OB admissions and transfers from other facilities

<sup>108</sup> Excludes OB admissions and transfers from other facilities

<sup>109</sup> Excludes OB admissions and transfers from other facilities

<sup>110</sup> Excludes admissions for cardiac procedures, OB and neonatal conditions and transfers from other facilities

<sup>111</sup> Excludes surgical patients, transfers, OB and neonatal admissions

<sup>112</sup> Excludes transfers from other facilities

<sup>113</sup> Excludes transfers from other facilities

hyperplasia for male Medicare beneficiaries in 1992-1993 ranged from about 5 per 1000 to approximately 28 per thousand – more than a five-fold difference.<sup>114</sup> The outcomes of these varying approaches to care carry with them differing levels of patient risk and, in all likelihood, differing implications for the outcome of treatment.

This means that health care providers in different areas of the state approach the treatment of the same condition in what can be significantly different ways, exhibiting a lack of consensus among our providers about how best to treat certain diseases and conditions.<sup>115</sup> Such variations are rarely attributable to differences among patients. While they are influenced by capacity – that is, the number of hospital beds per capita,<sup>116</sup> the availability of certain diagnostic equipment or the supply of specialists<sup>117</sup> -- they are very influenced by local practice patterns and physician decision making. Thus, by accident of geography, a patient might be treated surgically for a condition in, say, western Maine and treated medically for the same condition in northern Maine.

As the Institute of Medicine has suggested in its series of publications on improving the quality of care, we need to critically examine how we are practicing, delivering and receiving health care in an effort to improve our health care system and the outcomes of the care it provides.

***Objective 10: Improve Maine's Data and Information Technology Systems to Facilitate Improvements In Quality of Care***

One of the most important steps we can take to improve quality of care is to assure that we have the most comprehensive clinical data and administrative information available to us to assist in the timely delivery of appropriate care *and* to assist us in evaluating the care provided. As noted earlier, Maine is fortunate to have one of the most robust health care data sets in the nation. The paid claims data set, though, is still in its relative infancy, working to expand its range to include data from all payers and all providers working within Maine. The all payer paid claims data base, combined with powerful aggregating software tools will allow data analysis of the process of care to supply feedback to providers continuously improving and monitoring their processes. The Maine Health Data Organization is the state agency responsible for administering this data set; the MHDO reports that the all payer data base is expected to be accessible for public use by February 2005.

Quality of care depends in large part on the immediate accessibility of clinical data at the time and location of care. The IOM and the National Quality Forum recognize implementation of electronic medical records and access to clinical information among un-allied providers as the highest priority goal in improving the quality of health care. Such tools improve quality by providing timely clinical information simultaneously with reference rules and resources while simultaneously allowing reductions in the cost of care by eliminating repeat lab tests and imaging procedures and eliminating hospital admissions caused by lack of reassuring clinical data. Electronic medical records combined with a connectivity system allows the push of required public health reporting data to the Bureau of Health; real time reporting is required to comply with the federal effort of surveillance to detect bioterrorism. All patient level data is protected from unauthorized disclosure.

At the present time, the Bureau of Health is requesting proposals for assistance in the development and implementation of IPHIS – the Integrated Public Health Information System. The goal of IPHIS is to implement a centralized Internet-driven systems integration capability that

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<sup>114</sup> *op cit* at 70.

<sup>115</sup> *op cit* at 64.

<sup>116</sup> Wennberg JE, Freeman JL, Culp WJ. Are hospital services rationed in New Haven or over-utilized in Boston? *Lancet*. May 23, 1987:1185-1189.

<sup>117</sup> Keller RB, Griffin E, Schneiter EJ, Wennberg DE, Russell R. Searching for quality in medical care: the Maine Medical Assessment Foundation model. AHRQ Publication No. 00-N002. November 2000.



facilitates the timely, accurate and secure exchange of public health information within the Bureau of Health and within the state.

Strategies

- The state will take all action available to it to ensure the availability of the MHDO all payer data set by the target date of July 1, 2005.
  - Governor's Office to assist MHDO in submission of request for Medicare data June 2004
  - MaineCare data integrated into all payer database June 2004
  - Governor's Office follow up with CMS and Congressional Delegation regarding request for Medicare data, as needed Summer 2004
- The state will take all action available to it to ensure the timely implementation of the new IPHIS system by the target date of July 1, 2005

**Objective 11: Develop framework for comprehensive integrated, patient-level data system**

Although an important structural element for a quality health care system, IPHIS must be teamed and coordinated with other comprehensive information technologies to promote quality improvement. We must devote additional attention to the task of assuring a comprehensive, integrated medical information system for Maine.

Strategies

- Priority will be given to applicants for Certificate of Need review and approval who demonstrate investment in and/or use of an electronic medical records system with an HL7 interface, allowing for exchange of information. Effective June 2004
- The state, led by the Governor's Office with the Maine Quality Forum will actively participate in collaborative efforts to develop a comprehensive strategy for reducing the fragmentation of data across our health care system, including looking at ways to reduce cost barriers to and creating incentives for providers setting up Electronic Medical Record systems. This is to be accomplished via the integration of patient health and administrative data through a secure, patient controlled mechanism. This type of system would allow providers caring for a patient access to important clinical information without personally identifiable information being stored in a central "warehouse" thus alleviating privacy concerns.

Electronic Medical Record integration, "Personal Health Passport" and Claims Network (CHIN). Dirigo Health Agency and Maine Quality Forum are lead unless otherwise noted.

- Conduct initial meetings with stakeholders Summer 2004
- Identify and sign pilot hospital(s) January 2005
- Develop data repository structure/design system March 2005
- Test and implement at pilot site(s) June 2005
- Develop plan for roll out to other sites June 2005

For integrated claims network:

- GOHPF convenes initial meetings with stakeholders Fall 2004
- Identify and sign pilot insurer(s) January 2005
- Develop and design hub April 2005
- Test and implement at pilot site(s) June 2005
- Develop plan for roll out to other sites June 2005

## Section 4: Access

The high costs discussed in section 1 have enormous impact on Mainers' ability to access necessary health services. 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.<sup>118</sup> 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.<sup>119</sup>
- The median deductible in Maine in 2002 was over \$4,000.<sup>120</sup>
- 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.<sup>121</sup> 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. Maine has the highest rate of uninsured citizens in New England.<sup>122</sup> About 136,000 (17%) of non-elderly Maine residents spent part of 2002 uninsured. On any given day, roughly 1 in 8 non-elderly Mainers were uninsured. 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.<sup>123</sup>

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.<sup>124</sup> Health insurance would reduce mortality rates for the uninsured and could improve their annual earnings by 10-30%.<sup>125</sup>
- In Maine, over 11 percent of the population reports not visiting a physician because of cost.<sup>126</sup> 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.<sup>127</sup>
- In 2002 Maine's hospitals reported an estimated \$123 million in bad debt and \$68 million in charity care costs caring for the uninsured.<sup>128</sup> These costs are then passed on to insurance

<sup>118</sup> 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.

<sup>119</sup> *op cit* at 8.

<sup>120</sup> *op cit* at 8.

<sup>121</sup> *op cit* at 48.

<sup>122</sup> Kaiser Family Foundation, State Health Facts Online, [www.statehealthfacts.kff.org](http://www.statehealthfacts.kff.org).

<sup>123</sup> *op cit* at 8.

<sup>124</sup> Kaiser Family foundation, "Uninsured and Their Access to Health Care", Jan. 2003 Fact Sheet 1420-0y

<sup>125</sup> Jack Hadley, Sicker and Poorer: The Consequences of Being Uninsured, the Urban Institute, Washington, D.C., May 2002.

<sup>126</sup> AARP, *Reforming the Health Care System: State Profiles 2003*.

<sup>127</sup> *op cit* at 8.

companies, who in turn raise premiums for businesses and individuals causing the ranks of the uninsured to continue to grow.

Although "access" 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.<sup>129</sup> Originally described by Donabedian,<sup>130</sup> 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.

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. 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.

**Objective 12: Reduce the number of uninsured Mainers by 31,000.**

Reducing the ranks of the uninsured will both improve the lives of those who gain access to insurance and care as well as reduce bad debt and charity care costs that are then passed on to other premium payers.

Strategies

- Implement and market Dirigo Health coverage. 2004 & on-going
- Implement expansions of MaineCare (noncategorical adult eligibility from 100% to 125% of poverty and parents of MaineCare children from 150% to 200% of poverty) three months following implementation of Dirigo coverage program
- Continue the Federal Trade Adjustment Assistance Act's Health Care Tax Credit program and integrate it with Dirigo Health. on-going
- Support policies that facilitate and improve current levels of employer based coverage and take up rates on-going
- Enforce oversight and regulation of small and large group health insurance rates to prevent excessive premium increases. on-going

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<sup>128</sup> Maine Health Data Organization, 5/13/04.

<sup>129</sup> McLaughlin CG and Wyszewianski L. Access to care: remembering old lessons. *Health Services Research*. December 2002. Citing an earlier paper by Penchansky and Thomas.

<sup>130</sup> Donabedian A. *Aspects of Medical Care Administration: Specifying Requirements for Health Care*. Harvard University Press. Cambridge, MA. 1973.

**Objective 13: Preserve the fiscal and programmatic integrity of MaineCare as a safety net to cover Maine's lowest income citizens.**

MaineCare provides coverage for about 250,000 Maine citizens; an additional 100,000 receive assistance with prescription drug purchases. The program provides health and mental health coverage, long term care and an array of services for persons with disabilities. MaineCare helps private insurance work by covering costly, high risk individuals who are otherwise uninsurable and helps make Medicare work by covering cost-sharing for low income Medicare members. It is a critical safety net and is an entitlement program operated through a Federal-State partnership in which the Federal government provides about \$2 for every \$1 funded by the State.

The program has experienced budget shortfalls, addressed and resolved in the last Legislature, by establishing the MaineCare Basic plan for adults, increasing standardization of eligibility, enrollment and rate-setting and expanding prior authorization, utilization review and other strategies to assure appropriateness of services offered to manage program cost growth. These strategies will address program cost growth without cutting eligibility for persons in need.

Strategies

- Conduct monthly program oversight meetings between GOHPP and DHHS to assure compliance with budget and program goals. monthly
- Provide regular updates on MaineCare enrollment, service use and costs. quarterly
- Initiate limited MaineCare expansions as part of and funded through Dirigo Health 3 months following Dirigo's launch. December 2004
- GOHPP will produce a "State of the MaineCare program" report. October 2004

**Objective 14: Develop a resource inventory by region documenting health, mental health, substance abuse, public health and long term care resources and workforce.**

The combination of financial barriers and the mal-distribution of primary care sources in the rural areas of Maine result in significant barriers to appropriate care. In addition to the measures cited at the beginning of this section:

- The population underserved by primary care doctors, in 2003, was 8.4 percent – more than double the rate of Vermont, and 56 percent higher than the rate in New Hampshire.<sup>131</sup> These barriers to primary care no doubt contribute to the higher emergency room use rate seen in Maine (42 percent higher than Vermont and 26 percent higher than New Hampshire)<sup>132</sup> and the higher rates of hospital use, as noted earlier.
- 39 of Maine's 62 primary care analysis areas are federally designated primary care health professional shortage areas (have a ratio less than 1 provider per 3500 people).<sup>133</sup>
- 35 of Maine's 46 dental care analysis areas are federally designated dental health professional shortage areas (have a ratio of less than 1 dentist per 5000 people).<sup>134</sup>
- 12 of Maine's 33 mental health analysis areas are federally designated mental health professional shortage areas (have a ratio of less than either: 1 non-physician mental health provider per 9000 people; 1 psychiatrist per 30,000 people; or 1 non-physician mental health provider per 6000 people and 1 psychiatrist to 20,000 people).<sup>135</sup>

The inventory will include, but not be limited to, cataloguing the distribution of the following, to create baselines against which to measure current and future need:

<sup>131</sup> AARP Public Policy Institute. State Profiles 2003.

<sup>132</sup> Kaiser Family Foundation, State Health Facts Online, [www.statehealthfacts.kff.org](http://www.statehealthfacts.kff.org).

<sup>133</sup> [www.maine.gov/dhs/bohodr/pcaa\\_hpsa.pdf](http://www.maine.gov/dhs/bohodr/pcaa_hpsa.pdf)

<sup>134</sup> [www.maine.gov/dhs/bohodr/dcaa\\_hpsa.pdf](http://www.maine.gov/dhs/bohodr/dcaa_hpsa.pdf)

<sup>135</sup> [www.maine.gov/dhs/bohodr/mhaa\\_hpsa.pdf](http://www.maine.gov/dhs/bohodr/mhaa_hpsa.pdf)

- Current and projected incidence of various medical conditions;
- Primary care practices;
- Dental practices;
- Medical technology, including whether the technology is housed in a hospital or an ambulatory surgical center;
- Long term care services;
- Mental health services;
- Substance abuse services;
- Public health and preventative services;
- Workforce capacity.

Strategies

- |  |              |
|--|--------------|
| • Review and analyze current data bases including health resource information. | July 2004    |
| • Develop framework and work plan to complete the inventory.                   | August 2004  |
| • Work with Regional Workgroups to complete the inventory.                     | January 2005 |
| • Develop methods to put the inventory on-line and maintain its currency.      | March 2005   |

## **PART 3: PROCESS FOR FIRST BIENNIAL STATE HEALTH PLAN**

As stated at the beginning of this document, the purpose of the State Health Plan is to strategically improve the allocation and coordination of our health care resources to help Mainers become the healthiest people in the US. Data can provide baselines and identify choices to achieve this goal, but public engagement is required to set priorities that reflect Maine's values and can be embraced and sustained by Maine people. Similarly, goal-setting requires the involvement of all key players and open discussion of how progress toward meeting goals will be determined.

Over the next year the Governor's Office of Health Policy and Finance (GOHPF) will develop an aggressive and collaborative effort to set priorities and benchmarks and publish the 1<sup>st</sup> biennial State Health Plan.

### **The planning process will have five components:**

- A baseline of credible, regionalized data on cost, quality, access and health status.
- A regional process through 3 regional workgroups to engage all stakeholders to examine data, set regional goals and benchmarks.
- A statewide campaign "Tough Choices" to determine the public's priorities for health and health care.
- A statewide health expenditure target.
- A state-level synthesis of regional and State Health Plans.

Steps involved in each of these five components are in discussed in greater detail below. A timeline of specific action items follows this discussion.

#### ***Baseline of credible, regionalized data on cost, quality, access and health status***

- Create a baseline of data from Healthy Maine 2010 and related sources to establish statewide benchmarks for health status, costs, quality, access, and health status.

#### ***Regional process through 3 regional workgroups to engage all stakeholders to examine data, set regional goals and benchmarks***

- Divide state into 3 regions (Appendix 1)
- Regional forums will establish regional priorities, goals and targets.
- Conduct analysis of data by region, taking into consideration local planning and coordination processes already undertaken by a number of local groups and entities:
  - What are region's greatest health needs?
  - What are region's greatest health costs?
  - What is region's existing health resources/infrastructure (create an inventory)?
  - Do expenditures reflect investment in addressing identified needs?
  - What additional data/info is needed?
  - What are the key quality concerns in the region?
  - What needs are being well met in the region (e.g. exceed health status norms)?
  - How do costs compare region-to-region?
- Based on regional inventories/data establish process for engaging citizen and stakeholder concerns.

**Statewide campaign "Tough Choices" to determine the public's priorities for health and health care**

- Develop protocol "Tough Choices" to use in carefully structured community forums (e.g. America Speaks or study circles).
- Conduct community and stakeholder forums to test what choices Maine citizens prefer to improve health and balance cost, quality and access concerns.
- Synthesize findings and share statewide with stakeholder groups (businesses, providers, payers, consumers).

**Statewide Health Expenditure Targets**

- See "statewide health expenditure target" objective of the cost section of this One-Year Plan for a detailed discussion of the statewide health expenditure target and associated timeline.

**State-level synthesis of regional and State Health Plans**

- Synthesize available data regarding health status, cost, quality and access by region.
- Compile regional data into statewide inventory and report.
- Advisory Council on Health Systems Development (ACHSD) and the Maine Quality Forum (MQF) review regional data with GOHPF and expert consultants to make recommendations regarding: what targets should be statewide vs. regional.
- Using the approach and framework of the Maine Health Performance Council, state and regional health plans will have the following components:
  1. A set of specific performance goals and objectives with explicit indicators and measures.
  2. For each set of goals/objective(s)/indicators, there will be an accompanying plan that links problems to resources, strategy and actions to outcomes by addressing/defining the following:
    - The problem(s) that will be solved, including research and analysis that defines current baseline status.
    - The resources (broadly defined as policy, money, staff, etc.) currently committed to achieving this goal/objective (or that could be brought to bear).
    - The strategy (with evidence base established).
    - The actions/activities/outputs that will lead to the expected short and longer term performance outcomes.

The key to this approach will be to have plans that logically link resources, strategy, and actions to the specified performance outcomes (and that make the tough choices among competing investment/resource allocation strategies).

- Issue State Health Plan, reflecting regional goals and benchmarks and establishing specific goals and activities appropriate for statewide response and to govern CON.
- Identify strategies state government could support that would incentivize system change (e.g. reimbursement methods and levels by public purchasers; CON/CIF; investment strategies and goals of public health funding to community agencies; regulatory relief and/or initiatives, etc.).
- Assure state resource allocation reflects regional and state needs.

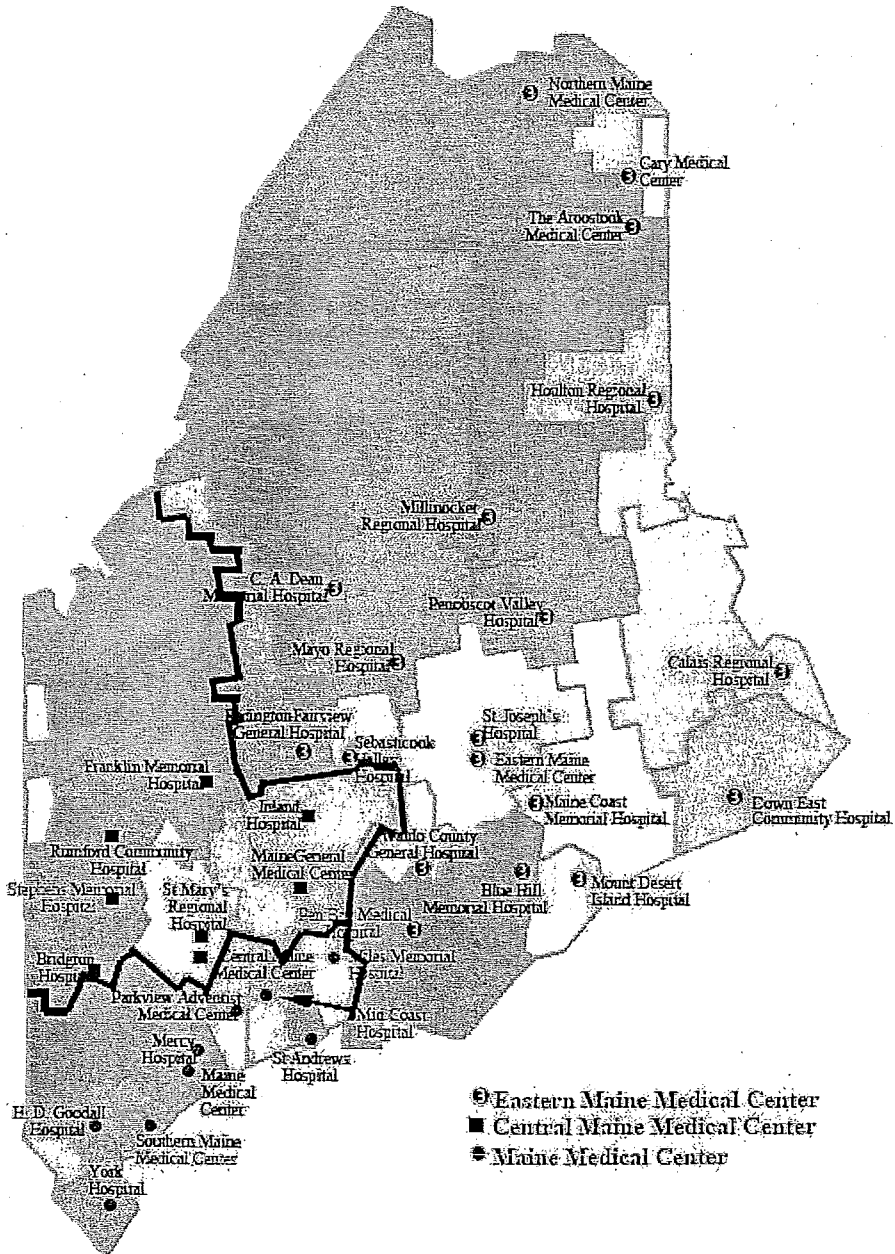
**Timeline for Development of Biennial State Health Plan**

- Publicize existing 3 EMS/BOH regions as State Health Plan regions. July, 2004
- Contract with consultant to research and identify effective approaches to engage public in planning (e.g.: America Speaks, study circles, other). July 2004
- Develop and report data by region. August 2004

- Assign staff to support regional workgroups and draft guidance for regional work plans. August 2004
- Convene regional stakeholders (providers, public health related community groups, businesses, other insurers, consumer groups) to present data. Select a representative workgroup of not more than 12 members to lead planning effort in each region, including one member of ACHSD. Sept-Oct 2004
- Develop regional work plans to identify and prioritize cost, quality, access initiatives and measurable benchmarks. Oct 2004
- Incorporate the recommendations of the Commission to Study Maine's Hospitals into the State Health Plan. Nov 2004
- Regional workgroups work with GOHPF to conduct statewide "Tough Choices" dialogue. These forums will be carefully constructed to glean information from representative samples of Maine citizens about their priorities and trade-offs. Nov 2004 – Jan 2005
- Obtain and begin analysis of CY2003 spending data from MHDO all-payer database. Feb 2005
- Regional workgroups develop regional plans/benchmarks. March 2005
- Get input from Maine Quality Forum. March 2005
- Regional workgroups advise ACHSD and establish statewide targets and benchmarks; goals, priorities and State Health Plan drafted; begin constructing statewide health expenditure target based on these priorities. April 2005
- ACHSD conducts 2 public hearings on plan. May 2005
- Synthesize regional reports, conduct public hearing and issue final biennial State Health Plan and statewide health expenditure target. June 2005



## Appendix 1. State Health Plan Regions



\*Does not include Veterans Administration (VA) Medical Center nor Mental Health Institutions

Updated November 21, 2003

## **Appendix 2. Technical notes for State Health Plan Figures**

Figures 3 & 4. Maine and US per capita income from the Bureau of Economic Analysis at U.S. Department of Commerce ([www.bea.doc.gov/bea/regional/spi/#download](http://www.bea.doc.gov/bea/regional/spi/#download)).

Maine per capita health care spending 1991-1998 is from [www.cms.hhs.gov/statistics/nhe/state-estimates-residence/us-per-capita10.asp](http://www.cms.hhs.gov/statistics/nhe/state-estimates-residence/us-per-capita10.asp). 1999-2004 Maine spending is from the State Health Plan Figure 7 (see notes below).

US per capita health care spending 1991 – 2002 is from [www.cms.hhs.gov/statistics/nhe/historical/t4.asp](http://www.cms.hhs.gov/statistics/nhe/historical/t4.asp). US 2003 and 2004 spending is from [www.cms.hhs.gov/statistics/nhe/projections-2003/t5.asp](http://www.cms.hhs.gov/statistics/nhe/projections-2003/t5.asp).

Figures 5 & 6. Median household income taken from US Census Bureau's 1996 through 2002 March Current Population Surveys, available through [www.census.gov/hhes/www/previnc.html](http://www.census.gov/hhes/www/previnc.html). Amounts used are two-year average medians in current year dollars.

Premiums taken from Medical Expenditure Panel Survey (MEPS) Health Insurance Dataset, available through [www.meps.ahrq.gov/Data\\_Pub/IC\\_Tables.htm](http://www.meps.ahrq.gov/Data_Pub/IC_Tables.htm). Amounts used are total cost (employee and employer share) of a family policy for businesses employing fewer than 50 employees (figure 5) and all businesses (figure 6).

MEPS did not provide Maine premiums for 1998 and 2000, so for these years we use the midpoint between the previous and successive year as an estimated amount.

Figures 7 & 8. Maine 1998 estimates are from [www.cms.hhs.gov/statistics/nhe/state-estimates-residence/phc-1998.asp](http://www.cms.hhs.gov/statistics/nhe/state-estimates-residence/phc-1998.asp). 1999-2004 projections are derived by applying national rates of growth from [www.cms.hhs.gov/statistics/nhe/projections-2003/t2.asp](http://www.cms.hhs.gov/statistics/nhe/projections-2003/t2.asp) to 1998 amount.

Maine Gross State Product obtained from the Maine State Planning Office, actual 1999-2001, projected 2002-2004.

1998 per capita amount in this table is slightly lower than CMS's due to CMS's use of a different population estimate (US Census); in order to use a single data source for all years, we use population estimates from the Maine State Planning Office, [www.state.me.us/spo/economics/economics/megraph.php](http://www.state.me.us/spo/economics/economics/megraph.php).

Consistent with the methodology employed by CMS, these numbers are NOT adjusted for inflation; i.e., 1999 GSP and health care spending are expressed in 1999 dollars, and 2004 GSP and health care spending are expressed in 2004 dollars.

### Appendix 3. State Health Expenditure Report Category Definitions

The 1998 estimates in Figure 7 are from the Center for Medicare and Medicaid Services' (CMS) National Health Expenditures state estimates.<sup>136</sup> CMS defines the categories included in its National Health Expenditure accounts as shown below. CMS's state estimates combine (i) *Physician and Clinical Services* and (ii) *Other Professional Services* into one line item.<sup>137</sup>

*Hospital Care:* Covers all services provided by hospitals to patients, including room and board, ancillary charges, services of resident physicians, inpatient pharmacy, hospital-based nursing home and home health care, and any other services billed by hospitals in the United States. The value is measured by total net revenue, which equals gross patient revenues (charges) less contractual adjustments, bad debts, and charity care. It also includes government tax appropriations as well as non-patient and non-operating revenues.

*Physician and Clinical Services:* Covers services provided in establishments operated by Doctors of Medicine (M.D.) and Doctors of Osteopathy (D.O.); outpatient care centers, plus the portion of medical laboratories services that are billed independently by the laboratories. This category also includes services rendered by a doctor of medicine (M.D.) or doctor of osteopathy (D.O.) in hospitals, if the physician bills independently for those services. Clinical services provided in freestanding outpatient clinics operated by the U.S. Department of Veterans Affairs and the U.S. Indian Health Service are also included. The establishments included in Physician and Clinical Services are classified in NAICS 62111-Offices of Physicians, NAICS 6214-Outpatient Care Centers, and a portion of NAICS 62151-Medical and Diagnostic Laboratories. These establishments were classified in SIC 801-Offices and Clinics of Doctors of Medicine, SIC 803-Doctors of Osteopathy, and a portion of SIC 8071-Medical Laboratories and SIC 809 Miscellaneous Health and Allied Services.

*Other Professional Services:* Covers services provided in establishments operated by health practitioners other than physicians and dentists. These professional services include those provided by private-duty nurses, chiropractors, podiatrists, optometrists, and physical, occupational and speech therapists, among other. Ambulance services paid under Medicare are also included here. These establishments are classified in NAICS-6213 Offices of Other Health Practitioners or roughly the equivalent of SIC 804-Offices and Clinics of Other Health Practitioners.

*Home Health Care:* Covers medical care provided in the home by private and public non-facility-based home health agencies (HHAs). Medical equipment sales or rentals not billed through HHAs and non-medical types of home care (e.g., Meals on Wheels, chore-worker services, friendly visits, or other custodial services) are excluded, as are nursing services provided by nurse registries. These freestanding HHAs are establishments that fall into NAICS 6216-Home Health Care Services or SIC 808-Home Health Agencies.

*Nursing Home Care:* Covers services provided in freestanding nursing home facilities. These include nursing and rehabilitative services generally for an extended period of time by staffs of registered or licensed practical nurses. Services provided in nursing facilities operated by the U.S. Department of Veterans Affairs and nursing home services in intermediate care facilities for the mentally retarded financed by the Medicaid program are also included. These establishments are classified in NAICS 6231-Nursing Care Facilities and NAICS 623311-Continuing Care Retirement Communities with on-site nursing care facilities or in SIC 805-Nursing and personal care.

<sup>136</sup> [www.cms.hhs.gov/statistics/nhe/state-estimates-residence/phc-1998.asp](http://www.cms.hhs.gov/statistics/nhe/state-estimates-residence/phc-1998.asp)

<sup>137</sup> [www.cms.hhs.gov/statistics/nhe/quick-reference](http://www.cms.hhs.gov/statistics/nhe/quick-reference)

*Dental Services:* Covers services provided in establishments operated by a doctor of dental medicine (D.M.D.) or doctor of dental surgery (D.D.S.) or a doctor of dental science (D.D.Sc.) These establishments are classified as NAICS 6212 Offices of Dentists or SIC 802-Offices and clinics of dentists.

*Durable Medical Equipment:* Includes the retail sales of items such as contact lenses, eyeglasses and other ophthalmic products, surgical and orthopedic products, equipment rental and hearing aids.

*[Drugs and] Non-Durable Medical Products:* Includes the retail sales of prescription drugs, non-prescription drugs, and medical sundries.

*Other Personal Health Care:* Covers industrial inplant services, or direct services provided by employers for the health care needs of their employees, offered either onsite or offsite. It also covers government expenditures for care not specified by kind. These government expenditures are frequently for medical care delivered in unconventional provider's sites such as schools, military field stations, and community centers. Payments provided through Home and Community-based waivers in the Medicaid program are included in other personal health care.

#### **Appendix 4. Members of the Advisory Council on Health Systems Development**

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