BACKGROUND REPORT FOR THE
TWENTY-THIRD NEW MEXICO FIRST TOWN HALL

Twenty-first Century Health Care in New Mexico: Constructing a Rational Plan

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PREPARED BY THE
UNIVERSITY OF NEW MEXICO HEALTH SCIENCES CENTER
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This report provides Town Hall participants with a review of the issues and information relevant to the Town Hall topic.

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Please note:  Health care is a very dynamic area.  Rules, policies, strategies and basic information about programs change constantly.  The information contained herein is collected from numerous sources and is as accurate as we know it to be at the time of publication.
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DETERMINANTS AND HEALTH STATUS

- Health is a product of many determinants with poverty and socioeconomic status being the most important. Others include education, environment, behavior, and availability of health care services.
- New Mexico lags behind the nation on many health indicators such as alcohol-related injuries, teen pregnancy, and health insurance coverage for children.
- For many health indicators, there are significant variations in outcomes among ethnic groups. This points to both differences in risk factors and socioeconomic status as well as the need for targeted intervention and prevention strategies.
- New Mexico fares well compared to the nation in the areas of cancer deaths and cardiovascular disease but fares poorly in intentional and unintentional injury deaths.
- Alcohol, tobacco and other drugs are among the worst contributors to ill health in New Mexico.
- Child health outcomes rank among the worst in the nation.
- Communities have a key role to play in health. Many are beginning to take concrete and meaningful steps to improve their health outcomes and are focusing on their assets and preventive measures.

HEALTH CARE DELIVERY SYSTEMS: AN OVERVIEW

- There are three different levels of care and prevention in the health care delivery system: primary, secondary and tertiary. More visits occur at the primary level but there are still more specialty providers than generalists.
- Health care can be provided in a wide variety of settings but today, more and more care occurs in outpatient settings, although hospital utilization has not declined in New Mexico.
- A wide range of health care professionals provide the state’s health care needs and each profession has its own scope of practice which delineates what s/he can do.
- The supply of health care providers in the state has improved over the past 10 years but shortages still exist, especially in rural areas. Urban areas along the Rio Grande corridor have 66-75% of the state’s physicians and nurses.
- Rural areas face many barriers in attracting and retaining providers. To date, efforts have focused more on recruitment but now retention is beginning to receive attention. Recent surveys may provide data to assist in developing better strategies to get and keep rural providers.
- Despite recent headlines, the number of physicians in the state may not be dwindling. There is still disagreement about the reality of a “flight of physicians.” What is clear, however, is that there is strong evidence of problems with physician morale.
Access to the health care system typically occurs as a result of having health insurance, which is most frequently provided by an employer (both public and private sector). 45% of New Mexicans have employer-provided insurance although the state has a low rate of employer-provided coverage.

The type of insurance coverage and terms of the policy determine how one accesses the health care system.

The percentage of uninsured adults (age 18-64) in the state has grown from 26% in 1990 to 28% in 1997.

There are 2 major theoretical models of health care delivery: the structured and linear “Regionalized” model and the more free-flowing, market-based “Dispersed” model. They offer stark differences in their approach to how care is delivered.

Key concerns around health care delivery are as follows: access to care for the uninsured, impact of managed care on patients and providers, overburden of paperwork on all parties, lack of planning and coordination, potential changes of nonprofit health care organizations to for-profit, long term care, rural-urban concerns, special needs populations such as the developmentally disabled and the mentally ill, and investor ownership of managed care and other health care organizations.

HEALTH CARE FINANCING AND ECONOMICS

Health care financing comes from two sources: public payers and private payers.

The public sector is a major player providing nearly half of the health care dollars in both the U.S. and more than half in New Mexico.

At the national level, overall health expenditures topped $1 trillion in 1997 or nearly $4,000 per capita.

Health care accounted for 13.5% of the nation’s gross domestic product in 1997.

In 1996, New Mexico spent $4.6 billion or $2,672 per person on personal health care.

Relative to per capita income, personal health expenditures were 14.3% in New Mexico as compared to 14% in the U.S.

Expenditures have been increasing but at the lowest rates of increase in more than 3 decades.

Managed care is playing a major role in health care financing, particularly in New Mexico.

The public sector share of expenditures is growing both at a national level and at the state level.

Projections for the future indicate substantial increases in health care costs.

SPECIAL ISSUES

Aging of the Population

New Mexico’s population is aging faster than the national average and will require additional services in the future. There are great needs for home care, long term care, support for caregivers, and community-based services.
• The Balanced Budget Act of 1997 has had a serious impact on the home health and nursing home providers. Reductions in payments have led to the exit of at least 70 home health agencies in the state, particularly in rural areas.

Behavioral Health/Mental Health
• Mental health problems are widespread – some type of mental illness will afflict 1 in 5 Americans during their lifetimes. Depression is the most common form and can contribute to negative health outcomes. Substance abuse and mental health problems are clearly linked and both problems often begin early in life.
• Obtaining mental health services is difficult particularly for those in rural areas as well as for other populations such as the developmentally disabled, the disabled, the elderly, members of American Indian communities, and many Medicaid recipients.

Border Health Issues
• The border area is a fast-growing and very poor area of the state that has a unique set of health challenges. Some of the key health issues include lack of access to health care, infectious diseases, diabetes mellitus, environmental hazards, behavioral and mental health, and teen pregnancy.
• Efforts to address these problems are underway through the newly formed U.S.-Mexico Border Health Commission as well as other local, state and federal initiatives. Additional coordination of services is a critical step to improve the health in this region.

Complementary and Alternative Medicine
• It is estimated that over 42% of U.S. adult population used some form of complementary or alternative medicine (CAM) in the past year and spent more that $21 billion on these therapies.
• In New Mexico, the most common CAM modalities are herbal medicine, homeopathy, vitamin and nutraceuticals, chiropractic, Native American medicine, massage therapy, acupuncture, and curandismo.

Persons with Disabilities and the Developmentally Disabled
• Persons with disabilities are a growing segment of the population, representing 16-18% of the U.S. Key areas of concern for the disabled include depression, mental health services, employment, environmental barriers, transportation, public health surveillance and health promotion, and housing.
• Developmental disability, a condition that impairs learning, communication, physical movement, and ability to care for one’s self, affects approximately 20,000 individuals in the state. Although funding has increased for this population, some additional needs include mental health services, dental care, services for the aging population, specialist access, prevention of abuse, greater focus on culturally sensitive and ethically based decisions.

Environmental Health
• Three key issues have been identified as the most important environmental health concerns in New Mexico: drinking water contamination related to growing industry and population, air quality in the middle and lower Rio Grande Valley, and contamination and improper labeling of food.
• Improvements are needed in state and local surveillance systems and the way in which monitoring data are analyzed.
Health Promotion/Health Education/Disease Prevention

- Efforts in this arena can pay off in improved health outcomes in the future. Programs that focus on children are especially effective to help establish healthy lifestyles that will be carried with them throughout their lives.

- There are a wide variety of programs underway in the state to improve the health outcomes of all New Mexicans no matter their age or income.

Indian Health Care

- The concept of tribes and Indian people having the right to determine their own future is as critical to health care as it is to any other aspect of Indian life. Self-determination also is a factor in the Federal trust responsibility to provide health care to Native Americans.

- Numerous changes and challenges face tribes especially the trend for the Federal government to transfer authority to the states such as in the Medicaid and welfare programs, New Mexico’s Medicaid managed care system, and tribes taking on their own health care as a result of P.L. 93-638.

Oral Health

- Oral health plays a significant but overlooked role in overall health. Recent research provides solid evidence linking poor physical health with poor oral health.

- Lack of availability of dental services is an ongoing problem in New Mexico and one of the major reasons that there is a shortage of providers, especially in rural areas and for several populations.

Public Health System

- There are three key functions of public health: assurance, assessment, and policy development.

- In New Mexico, the Public Health Division of the Department of Health has been redefining its role to shift from a primarily clinically focused organization that provides direct services to clients to one that helps activate communities to address the determinants of their own health problems.

Rural Health

- Rural areas tend to have higher levels of poverty, more elderly, greater number of uninsured, higher levels of unemployment, and lower paying jobs. These characteristics translate into numerous barriers to health care access.

- Poverty and the lack of community financial resources play out in numerous ways including the inability to maintain hospitals and the ability to recruit and retain providers. Experts suggest that better networks of providers along with improved communication, coordination and transportation are key to solving problems.

Training of Health Care Providers and the Role of Academic Health Centers

- Preparing health care providers is a task shared among more than 2 dozen colleges, universities, community colleges and proprietary schools. The programs these schools offer are expanding and are restructuring to provide students with the skills to work in today’s health care environment and to meet the needs of the state, especially rural areas.

- The University of New Mexico Health Sciences Center is the state’s only academic health center (AHC) and offers the opportunity to provide research and educational experience to patient care and communities. Since AHC have broad missions, they are more costly to operate than other health care facilities. Declining funding from federal programs and third party payers is creating financial challenges for institutions like UNM.
Other Concerns/Influences

- The complexity of the health care system has become a barrier for many – especially the elderly and those who do not speak English as his/her primary language.
- The exploding amount of health information available to consumers can leave the less informed vulnerable to bad information. An informed consumer is the best defense.
- Direct marketing of products by pharmaceutical companies to consumers drives up potentially unnecessary demand and cost.
- The ability of the health care system to keep health information private and confidential is a growing concern.
- Despite the efforts of many people providing programs in both the public and private sector, there is a large number of people who are not aware of many health programs and services that are available.
- Culture and language continue to be barriers to care and they need to be addressed if health care is to be delivered effectively.

Philosophy, Policy and Public Dialogue

- Pooling our limited resources in some way probably is necessary to cover costs of medically necessary care.
- Organizations that “hold the pool of resources” have the ethical obligation to balance individual and population health, as well as health professional education/training.
- For-profit and not-for-profit approaches have both benefits and limits when applied to financing health care delivery.
- The 1990 Town Hall, “Health Care: Rights and Privileges,” issued a set of policy recommendations, some of which have been achieved.
- Concrete statements of values, principles and goals should direct public dialogue.
- Public dialogue should be organized, respectful and candid. (See Oregon’s experiment with community dialogue leading to prioritization of covered benefits.)
- How should New Mexico design and deliver health care?
- “Efficiency” is a goal-dependent measure.

Re-Structuring Health Care

- Despite amazing technological advances and extended life expectancy for most Americans, the aggregate health of the whole population has fared less well.
- Economic factors affect availability of care and access to service; 1 in 4 New Mexicans are uninsured and cite cost as the main reason for no coverage.
- Any restructuring of health care for New Mexico must include a balance between personal and public responsibilities.
New Mexico has strengths as well as needs in the areas of access, cost and quality – the oft-stated goals of a health care system.

Before solutions to the problems are posed, the most important step is to determine what outcomes are desired in a health care system.

Outcomes can be either broad, large-scale goals (macro) or outcomes that are more specific to behaviors, diseases or services (micro).

To break out of a narrow two-dimensional model for restructuring health care, a five dimensional model is proposed which allows greater flexibility in choosing options for a system.

New Mexico has a health policy in statute. If we accept this policy, it is time to actualize this vision but we need to address 3 key challenges that lie in our path.

There is a sense that people in the state are ready for action on health care.
Chapter 1:  

INTRODUCTION

How should we in New Mexico balance individual needs and responsibilities with population health interests? Should we treat health care as a basic right, available for everyone, or as a commodity to be purchased by those who can afford it? What is the proper role for for-profit enterprises in delivering health care services? Who should have access to health care in New Mexico? How should we pay for health care? What kind of organizations should deliver it? What do we want from a health care delivery system? What is meant by health? How have things changed since the 1990 New Mexico First Health Care Town Hall issued its report with recommendations?

These questions, and others like them, have guided the preparation of this background briefing document. Each chapter begins with a “Chapter Summary,” which highlights, in order, the topics that will be discussed in more detail. Terms whose definitions are important and/or somewhat obscure are **bolded and italicized** to send you to the glossary at the end of the report. We have included charts, diagrams, text boxes with actual quotations from interviewees, and case studies, to illustrate the issues as directly and concretely as possible. Each chapter concludes with a bibliography. Even then, we acknowledge that we have only scratched the surface of this complex and clearly urgent issue.

We believe that all policy discussions and decisions should be informed by sound information, and so we have organized this report around several content areas we consider important:

- **Chapter 2: “Determinants and Health Status,”** begins with the premise that health is a product of many determinants that are interrelated, with poverty and socioeconomic status playing a large role. Other determinants include education, environment, behavior, and the availability of health care services.

- **Chapter 3: “Health Care Delivery Systems,”** describes how and where health care is, and might be delivered, by looking at 5 questions: What kind of care is delivered? Where is care provided? How is care organized? Who provides the care? How do patients get into the system?

- **Chapter 4: “Health Care Financing and Economics,”** explains how the two sources of health care financing (public and private payers) combine to form the “system” currently in place.

- **Chapter 5: “Special Issues,”** offers brief synopses of 12 issues important to New Mexico’s health care system (in alphabetical order):
• The aging of the population
• Behavioral health/mental health
• Border health issues
• Complementary and alternative medicine
• Environmental health
• Health education/health promotion/disease prevention
• Indian health care and tribal self-determination in health care
• Oral health
• Persons with Disabilities and the Developmentally Disabled
• The public health system
• Rural health issues
• Training of health care providers and academic health centers

• **Chapter 6: “Philosophy, Policy and Public Dialogue”** presents, in a somewhat more global fashion, a selection of the concepts, assumptions, values and goals that must be explicitly dealt with in any attempt to reorganize and create a more “rational” health care delivery system. It reviews the 1990 Town Hall Report and Recommendations, and suggests some guidelines for continuing public dialogue.

• **Chapter 7: “Re-structuring Health Care: What Kinds of Outcomes Do We Want and What Are Our Options?”** At this point in the report a great deal of information has been provided on health status, health care delivery systems, health care financing, a variety of special issues that face the state, and philosophy. How can we take all of this information and, in ways appropriate and responsive to the needs and interests of New Mexicans, work toward creating a system that works—that is, one that is guided by our values, and achieves the goals we have identified as most important? Several options are presented for discussion.

To repeat, perhaps we should start with the question: What is, or should be, the overall goal of the health care delivery system in New Mexico? We need to have some idea of our desired destination before we decide what route to travel.
Chapter 2:

DETERMINANTS AND HEALTH STATUS

SUMMARY

- Health is a product of many determinants with poverty and socioeconomic status being the most important. Others include education, environment, behavior, and availability of health care services.

- New Mexico lags behind the nation on many health indicators such as alcohol-related injuries, teen pregnancy, and health insurance coverage for children.

- For many health indicators, there are significant variations in outcomes among ethnic groups. This points to both differences in risk factors and socioeconomic status as well as the need for targeted intervention and prevention strategies.

- New Mexico fares well compared to the nation in the areas of cancer deaths and cardiovascular disease but fares poorly in intentional and unintentional injury deaths.

- Alcohol, tobacco and other drugs are among the worst contributors to ill health in New Mexico.

- Child health outcomes rank among the worst in the nation.

- Communities have a key role to play in health. Many are beginning to take concrete and meaningful steps to improve their health outcomes and are focusing on their assets and preventive measures.
Pick almost any health indicator and it is likely that you will see that health status in New Mexico is frequently just the opposite of where we want to be. We are near the bottom for many of the things that we hope to be good in, such as percent of children with health insurance, and near the top for the bad things, such as the number of teen births and the number of alcohol related-crashes. It seems that we can never quite pull ourselves “out of the cellar,” as one interviewee put it. As was the case in 1990, numerous efforts are underway to help improve our bleak statistics. Many of these programs are working, but we still haven’t found a way to shake the state out of its doldrums.

As you read this chapter, we ask that you think about two principles: first, the principle of **determinants** or **risk factors** – what are the multiple causes of our low health status? Secondly, we want you to consider the principle of **prevention** – once we know the determinants or causes, how can we prevent illness from occurring?

**Ecologic Determinants**

In looking at health status, it is important to consider that health is the product of many factors. For most people, two factors first come to mind—individual behavior and availability of health care services. It is true that both of these clearly contribute to health outcomes. Research has shown that if an individual chooses to smoke, drink alcohol or eat poorly then s/he will be at greater risk for poorer health outcomes than someone who chooses healthier behaviors. Likewise if a person cannot get medical treatment for a heart attack, then she will likely have a poorer outcome than she would have if she had received attention. However, there are four other factors that have been shown to contribute to health: economic factors, social and physical environment, cultural factors, and family risk factors. The interrelationship of these factors, known as the **ecologic determinants model**, are diagrammed here. An example of the role of tobacco use as a risk factor for poor health illustrates this model.
Poverty and Socioeconomic Status

Each of the risk factors described in the diagram on the previous page has an impact on an individual’s health status. There is also a synergistic effect among these factors—the more risk factors a person has, the more likely he will have poor health. However, research has shown that one of the most potent of these risk factors is poverty. Although it may seem to be outside the scope of this report, numerous studies have consistently shown the powerful role that poverty plays in determining the health of both an individual as well as a group of people. Given this strong evidence, “it is surprising that so little attention has been given to this factor in health promotion and disease prevention efforts.” (Kaplan, 1987) A recent study has provided even greater recognition that a child growing up in “adverse socioeco-
nomic circumstances” is at greater risk for many specific types of poor health outcomes such as stroke, stomach cancer and cardiovascular disease. (Smith, 1998)

The notion that the health care system is part of a bigger picture was clearly stated eleven years ago when the Governor’s Health Policy Advisory Committee (GHPAC) issued its report in 1988. Their number one priority to improve the health of the state was to “actively support and encourage economic development, enhanced educational levels, and improved environmental quality…as important precursors to improved health status.” The Committee clearly understood the linkages between health and the broader socioeconomic context as stated in their final report:

Good health is not a product of the health system alone. There are a number of prerequisites for positive health that are not traditionally considered part of the health system, including food, air, water, shelter, clothing, education, and social/economic level…. In particular there is strong evidence that there are close relationships among income, education and health status, with people at lower social/economic and educational levels having higher rates of premature death and illness than others in society. Lower educational levels are directly related to lower social/economic status and also independently make it more difficult for individuals to learn about and take appropriate responsibility for their own health. (GHPAC Executive Summary, 1988, p. 1)

Income Distribution

In addition to the need to understand the overall influence of economics on health, numerous studies have shown that there is also a link between health and inequities in income distribution. There is evidence that countries with the greatest differences in incomes also have worse health outcomes than countries with more equally distributed income. This has relevance for New Mexico because there is a widening gap between the “haves” and the “have-nots.” Furthermore, since there has been an erosion of some of the social supports to the less advantaged, this will have an impact on the health outcomes of the state’s poorest families. One example that illustrates the impact of these eroding resources is recent studies that have documented the growing problem of hunger in the state. Even families receiving
assistance from the food stamp program are reporting going hungry and not having enough money to buy food (Voorhees, 1997). Food banks and feeding programs are reporting record numbers of clients seeking food. The state’s largest food bank states it provided three times more food to clients in 1998 than in 1995, which the food bank attributes to cuts in the federal food stamp program. (M. Wattenbarger, personal communication, August 26, 1999)

Since the scope of this report is to discuss health and health care in New Mexico, we believe that the link must be stated between these two elements. We know from research that poverty, lack of economic development, and disparities in income are among the leading risk factors for poor health outcomes. Given this knowledge, it is apparent that we can’t depend on the health care system alone to solve all of the state’s health problems. Some ills cannot simply be fixed by medical intervention. Developing a solution to the state’s economic woes is clearly outside the scope of this report. However, understanding the impact of both the economy, as well as the structure of our entire economic system, on the health of our population will provide the context for the deeper issues of health outcomes. Although the task before the participants is to understand health care and propose solutions to fix our current system, one cannot completely do so without understanding these overarching issues.

“We need a ‘health impact statement’ similar to an environmental impact statement for policymakers to consider when providing tax incentives and Industrial Revenue Bonds to companies to move into the state – what kind of health impact will this company have and what type of health benefits will they offer to their employees?”

– INTERVIEWEE

A Look at the Data

New Mexico is a geographically large state that is sparsely populated in most of its landmass. The state is the fifth largest in size and has more than half of its population living in rural areas. It is a culturally rich state with the second highest percentage of ethnic minorities (38% Hispanic, 9% Native American, and 2% African American). The state is also fairly young – 29 percent of the state’s population is under 18. New Mexico is also a very poor state and ranks first in the percentage of adults living below the federal poverty level and first in the percentage of its population that is uninsured (22.6% or 413,000 individuals, all ages; 28% for ages 19-64). Unfortunately the state leads the country in several disturbing health statistics. New Mexico is among the top three states in rates of motor vehicle crashes as a cause of death (24.2 deaths per 100,000 -- nearly half were alcohol-related), of births to teen mothers (18%), of births to single mothers (43.1%), and ranks next to last in adequate prenatal care (52%).
Every 2 hours a baby is born to a teenage mother in New Mexico.

– Children’s Defense Fund

*Children in the States*
## SELECTED HEALTH INDICATORS – 1990 AND 1997

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>MORTALITY</strong></td>
<td></td>
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</tr>
<tr>
<td>Infant Mortality</td>
<td>8.9</td>
<td>6.5</td>
<td>9.2</td>
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</tr>
<tr>
<td></td>
<td>Number per 1,000 live births</td>
<td></td>
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<tr>
<td>Teen deaths by accident, homicide and suicide</td>
<td>102&lt;sup&gt;1&lt;/sup&gt;</td>
<td>93&lt;sup&gt;3&lt;/sup&gt;</td>
<td>63&lt;sup&gt;1&lt;/sup&gt;</td>
<td>62&lt;sup&gt;3&lt;/sup&gt;</td>
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<tr>
<td></td>
<td>Deaths per 100,000 persons ages 15-19</td>
<td></td>
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<tr>
<td>Child death rate</td>
<td>50&lt;sup&gt;1&lt;/sup&gt;</td>
<td>33&lt;sup&gt;3&lt;/sup&gt;</td>
<td>34&lt;sup&gt;1&lt;/sup&gt;</td>
<td>26&lt;sup&gt;3&lt;/sup&gt;</td>
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<tr>
<td></td>
<td>Deaths per 100,000 children ages 1-14</td>
<td></td>
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<tr>
<td>Accidental Deaths</td>
<td>56.2</td>
<td>53.5</td>
<td>37.0</td>
<td>35.0</td>
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<tr>
<td></td>
<td>Number per 100,000 persons</td>
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<td></td>
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<tr>
<td>Motor Vehicle Death Rate</td>
<td>25.8</td>
<td>30.3&lt;sup&gt;3&lt;/sup&gt;</td>
<td>15.8&lt;sup&gt;1&lt;/sup&gt;</td>
<td>16.3&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Rate per 100,000 population</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart Disease</td>
<td>--</td>
<td>25.6&lt;sup&gt;3&lt;/sup&gt;</td>
<td>--</td>
<td>31.6&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>As a % of all deaths</td>
<td></td>
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<tr>
<td>Cancer</td>
<td>--</td>
<td>22.0&lt;sup&gt;3&lt;/sup&gt;</td>
<td>--</td>
<td>23.4&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>As a % of all deaths</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Years of Potential Life Lost</td>
<td>70.1</td>
<td>66.2</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>Per 1,000 persons ages 1-64 years</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>MORBIDITY</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Teen birth rate</td>
<td>42&lt;sup&gt;1&lt;/sup&gt;</td>
<td>49&lt;sup&gt;4&lt;/sup&gt;</td>
<td>31&lt;sup&gt;1&lt;/sup&gt;</td>
<td>36&lt;sup&gt;4&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Births per 1,000 females ages 15-17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevalence of Youth Smoking (%)</td>
<td>32.6&lt;sup&gt;4&lt;/sup&gt;</td>
<td>33</td>
<td>30.5&lt;sup&gt;4&lt;/sup&gt;</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>(Grade 7-12)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevalence of Adult Smoking (%)</td>
<td>22.7</td>
<td>22.1</td>
<td>21.2&lt;sup&gt;4&lt;/sup&gt;</td>
<td>23.2</td>
</tr>
<tr>
<td>AIDS</td>
<td>7.2</td>
<td>12.0&lt;sup&gt;3&lt;/sup&gt;</td>
<td>16.7</td>
<td>25.2&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Cases per 100,000</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>ECONOMIC CHARACTERISTICS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of Children in Poverty</td>
<td>281</td>
<td>30&lt;sup&gt;2&lt;/sup&gt;</td>
<td>21&lt;sup&gt;1&lt;/sup&gt;</td>
<td>21&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>Percent of Children without health insurance</td>
<td>22</td>
<td>20.1</td>
<td>13</td>
<td>14&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>Percent of children covered by Medicaid or other public-sector health insurance</td>
<td>20.4</td>
<td>33&lt;sup&gt;3&lt;/sup&gt;</td>
<td>18.6</td>
<td>25&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>Percent of 2 years olds who were immunized</td>
<td>--</td>
<td>80&lt;sup&gt;1&lt;/sup&gt;</td>
<td>--</td>
<td>78&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>Percent of total population uninsured</td>
<td>22.2</td>
<td>22.6</td>
<td>13.9</td>
<td>16.1</td>
</tr>
<tr>
<td>Percent of population uninsured Non-elderly, ages 19-64</td>
<td>26</td>
<td>28</td>
<td>17</td>
<td>20</td>
</tr>
</tbody>
</table>

Sources: Health Policy Commission, KIDS Count, Department of Health, Health Resources Service Administration

<sup>1</sup>1992 data  
<sup>2</sup>1993 data  
<sup>3</sup>1994 data  
<sup>4</sup>1996 data
The data in these charts offer a mixed picture of New Mexico’s health. In some areas we have improved our standing from where we were a decade ago, but in many areas we have slipped further behind. Here is a sampling of what the data tell us:

- **Reductions in unintentional injury deaths** show some improvement but the state still continues to exceed the national average in these deaths. Unintentional injuries are the leading cause of death in New Mexico for people age 1-44 and transportation-related injuries account for over half of these deaths. Although we have a serious problem with motor-vehicle-related deaths, there has been progress that has come as a result of collaborative efforts between traffic safety officials, law enforcement and advocates. Between 1980 and 1997, annual deaths dropped from 623 to 485 helped by increased safety belt use, improved vehicle design and increased enforcement of traffic safety laws. A major traffic safety improvement resulted from new laws that crack down on driving while intoxicated/impaired (DWI). Increased prevention and treatment efforts, ongoing checkpoints and saturation patrols as well as intense publicity have also played a major role. These efforts have resulted in a 49% reduction in alcohol-related fatal crashes from 1980 to 1997. Unfortunately we still lead the nation in deaths of pedestrians killed by motor vehicles, which usually involves either the driver or the pedestrian being intoxicated.

- **Birth defects, low birth weight and Sudden Infant Death Syndrome (SIDS)** are the leading causes of infant mortality in New Mexico. Ten years ago we had nearly 9 deaths for every 1,000 live births and, in 1997, that number decreased to 6.5/1,000 live births -- about 60 fewer infant deaths each year. Although all of the reasons behind this dramatic decline are not fully understood, the decreases in SIDS (50% decline between 1995 and 1997) coincide with a statewide campaign to put infants to sleep on their backs. This campaign came as a result of collaborative efforts between several agencies and advocacy groups. Other efforts to increase awareness of risk reduction methods such as increasing dietary intake of folic acid/folate before and during pregnancy and not smoking or using alcohol during pregnancy may have had an impact as well. Efforts to improve prenatal care still need to be bolstered since the state falls nearly 20% behind the national goal of having 90% of women beginning prenatal care in their first three months of pregnancy.

- **Substance abuse** continues to be one of the major factors in the state’s poor health status both in terms of morbidity and mortality. Alcohol is the leading underlying cause of premature death (under age 65) and continues to play a key role in a large proportion of injury-related deaths and injuries in the state. In addition to motor vehicle deaths, alcohol is involved in 50% of non-motor-vehicle unintentional deaths, 53% of homicide deaths and 44% of suicide deaths. Tobacco use is the second leading cause of premature death in the state and is the major risk factor in cancer, heart disease, chronic lung disease and stroke. Recent studies have shown that tobacco use is on the upswing among New Mexico’s youth and this has serious implications for the future health of our state. Illegal drug use is also increasing among youth and has reached epidemic proportions in a few
Northern New Mexico communities. New Mexico leads the nation in the rate of drug-associated deaths.

- In cardiovascular disease deaths, New Mexico is well below the national average. In 1996, the state’s *age-adjusted death rate* is 135 per 100,000 population compared to the U.S. rate of 171 per 100,000. Even within the subcategory of heart disease and stroke deaths, the state does better than the national average. All of these statistics, with the exception of New Mexico’s stroke death rate, have improved since 1992 when the data were initially collected for Healthy People 2000. New Mexico’s historically low rate of tobacco use may be contributing to these good results. Unfortunately the rising rates of tobacco use in youth will inevitably undercut the state’s relatively good national ranking.

- The state’s lung cancer death rate is substantially lower than the national average. New Mexico’s rate dropped from 25.3 per 100,000 people (age-adjusted) in 1992 to 24.2 in 1996. This compares to the national average of 39.3 deaths per 100,000 in 1992 and 37.9 in 1996. Since New Mexico has a slightly lower rate of smoking, it would be expected that the rate would be less. However, since the rate of teen smoking is increasing dramatically in the state, future projections are not likely to be as positive unless there are major efforts put forth to reverse this trend. Money coming to New Mexico from the state’s settlement with the major tobacco companies should provide funds for programs to address this increasing problem.

- New Mexico equals the national average in female breast cancer deaths with 20.3 deaths per 100,000 women (age-adjusted). This rate is better than the 1992 rate of 21.2 deaths per 100,000. During this period, there has been an aggressive campaign sponsored by the Centers for Disease Control and Prevention in conjunction with the New Mexico Department of Health and the Indian Health Service to provide low-cost screening mammograms to low income, uninsured and underinsured women.

- The unmet needs of children in New Mexico are great and impact the health and well being of children and youth in our state. According to the *1997 KIDS COUNT in New Mexico Data Book*, every day in New Mexico:
  - 31 babies are born to single mothers
  - 22 babies are born into poverty
  - 12 students drop out of school
  - 24 cases of child abuse are substantiated
  - 3 children are seriously injured
  - 2 children are sexually abused

And every week in New Mexico:
  - 3 babies die before they reach one year of age
  - 5 children under age 18 die, and 3 of these deaths are a result of an accident, suicide or homicide.
New Mexico ranks 28th in the nation in low birth weight (LBW), with a rate of 7.3% as compared to a national rate of 7.2%. However, if you look at the data more closely by race/ethnicity, there are dramatic differences among the groups. According to a recent report by the New Mexico Prenatal Network, the state ranks 49th in LBW for Whites (Hispanic and non-Hispanic Whites are combined for national data reporting). Moreover, if the data is further separated, there are even more dramatic differences between Hispanic and non-Hispanic Whites, and even additional differences among Hispanic groups (Mexican Hispanic, U.S. Southwest Hispanic and Other Hispanic). The reason for the difference between our aggregate rate and the ethnic-specific rate is the state’s relatively small African American population. African Americans tend to have high rates of LBW. In aggregate, our mostly Hispanic and non-Hispanic white population, in comparison with states that have much higher numbers of African Americans, masks a substantial ongoing problem of LBW. In addition to pointing out how different populations can affect health statistics, this example also shows how there can be big differences between ethnic groups when looking at health outcomes.

The above example describing differences among ethnic groups is not isolated. If you look at the data for many indicators, you will see that there is frequently a difference in the statistics among ethnic groups. The charts below show selected causes of death for two different age groups and compare these causes of death by ethnicity. These differences point to the fact that risk factors differ among ethnic groups, and the risk factors are strongly influenced by socio-economic status. This also drives home the point that intervention and prevention strategies need to be targeted to specific populations.

These data are taken from the 1996 New Mexico Selected Health Statistics Annual Report and come from the death certificates compiled by the New Mexico Vital Records and Health Statistics in the Department of Health. All numbers are presented as cases per 100,000.
Concern for the Future—Our Children’s Health

Unfortunately the area where we continue to fall short is with our children. Ranking after ranking shows the state as failing its youth in terms of health and educational outcomes. According to the 1999 Children’s Rights Council report of the best states to raise a child, New Mexico is the second worst state in which to raise a child in the United States. The state fell to 49th from its rank of 36th in 1995. Criteria used to rate states include infant mortality, rate of prenatal care in first trimester, percentage of children referred for investigation of alleged abuse and neglect, immunization rate, child death rate, and public school graduation rate. The Annie B. Casey Foundation’s KIDS COUNT report ranks the state fourth from the bottom in its overall composite ranking which takes into account a variety of child health measures including teen birth rate and rate of teen deaths by accident, homicide and suicide. The 1999 KIDS COUNT overall rankings show that New Mexico dropped four places from 1990 to 1996 (most recent data available). As can be seen from the types of data that these rankings monitor, many of these outcomes are directly related to the lower socioeconomic status of children.

These negative reports do not bode well for the future health of our state. With worsening child health outcomes, we can predict that we will have poorer health outcomes when these children become adults. Even more important is that by having so many of our children at risk, the state is gambling with more than just the promise of additional health costs. With such a large number of children who are vulnerable, New Mexico risks much of its economic future as well. By not taking better care of our children, we may be charting a course that will deprive New Mexico of a brighter economic future and thus continuing the cycle of poverty and poor health for generations to come.

Future Directions and Implications for Policy and Prevention

Clearly the current state of New Mexico’s health is not our ideal vision. There are many steps that can be taken—in fact, many steps are being taken—to improve our overall health outcomes. One of the most exciting things is that many communities are becoming more involved in their own health. As the case of Socorro’s efforts to reduce teen pregnancy illustrates (see case on page 25), communities do have the capacity to make meaningful changes in their health. Many coalitions that have to date focused on a single issue are now broadening and joining together with other groups to tackle some of the pressing health issues that their communities face. Many communities are developing health councils to undertake community-based planning and prioritization. Communities, in partnership with agencies such as the Department of Health, are also focusing more resources on prevention instead of just trying to cure problems once they exist. Examples of these types of preventive programs include early childhood intervention programs such as home visitation or developing Health-
ier Schools coalitions to support prevention and health in local schools. Home visitation of at-risk parents, for example, has shown lasting positive effects (i.e. less youth delinquency, higher grade point average, fewer risky behaviors). These community-based, preventive efforts seem to be the trend for the future.

Another future direction is that of organizations and communities focusing on their assets. This approach is a 180-degree shift from the way we have always approached problems. The assets model looks at the strengths and the potential instead of focusing on the negatives. For example, one of the assets that New Mexico has in facing its health problems is its cultural diversity and tolerance. Because of our diversity we are more willing to explore a wide range of models in order to find the one that works for a particular issue or community.

Since children are a key to the health of the state, it is imperative that targeted children’s programs be part of any health care solution that is developed. Access to basic health care for our children is critical as is providing comprehensive services that deal with more than just immunizations and other medical services. Such comprehensive services include mental and behavioral health services, oral health care, early childhood education, childcare, programs such as Headstart, educational screening, and support to families. These services should be delivered in a coordinated manner that doesn’t require “agency-hopping” on the part of the child and the family.

The newly created New Mexico State Children’s Health Insurance Program (SCHIP) could help move the state forward in implementing a model that links traditional health care with this expanded view of health-related services. SCHIP is a federal-state program, created under Title XXI of the Social Security Act, which expands health coverage to uninsured children whose families earn too much for Medicaid but too little to afford private coverage. It builds on Medicaid and allows states to determine eligibility and benefits. Each state has to develop a plan and submit it for approval by the Health Care Financing Administration (HCFA).

Phase I of the state’s SCHIP plan was approved in January 1999 and it expands Medicaid to a few thousand children in families earning between 185-235% of the Federal Poverty Level. Unfortunately the part of the SCHIP plan that held great promise for providing these comprehensive services to children, Phase IIA, was denied by HCFA but an appeal for reconsideration is underway. Without the funds provided by this part of the program, there will be no means to pay for important services such as home visits for early intervention, school-based services and dental services. Conventional Medicaid may possibly be used to cover some of these services but it will be at a greater cost than would be using SCHIP. Despite its unclear future, the kind of comprehensive approach to health outlined in the SCHIP proposal should serve as a model to the state as it works to implement a health strategy for all New Mexicans.

Finally, it is important to remember that health is the sum of many factors – not just health care. At a macro level we need to understand that poverty, education, employment and other social factors are critical determinants of health. Improvements in job opportuni-
ties, wages, education, housing and other economic activities will probably do more to improve health in New Mexico than will many changes in the health care infrastructure. In addition to the macro level determinants, micro level factors also need to be considered such as family and individual risk factors. These more individual factors also play an important role in a person’s health and outcomes can be greatly improved by clearly focusing on prevention.

It’s so easy for us to get caught up in trying to make the perfect system that we lose sight of the most important things – things like what kind of health do we want – the outcomes. We also tend to want to take the easy way and not focus on the most critical steps – but maybe difficult steps – to get us there.

— INTERVIEWEE
How Communities Can Take Charge of Their Health

In Socorro, there was a concern about teen pregnancy – the county led the state in its teen pregnancy rate. In 1994 nearly 33% of all births in Socorro County were to teen mothers. The Maternal Child Health (MCH) Council had been in existence for five years but in 1994 the council received funding to hire a coordinator for the program. This coordinator, Beth Beers, began working to raise awareness of the problem and to pull together a broader coalition of community members to address it.

The first step was to get agreement that teen pregnancy was to be the focus of the coalition’s efforts. Once that agreement was made, then the coalition determined how they would tackle the problem. The first step was to begin school-based education for grades 6 through 12, but to particularly concentrate on the younger students who were considered more at risk. The second step was to build both the coalition membership as well as a greater community understanding of the problem by making as many presentations as possible to all kinds of local groups.

As the word spread, more and more people wanted to get involved: youth, parents, schools, businesses, Socorro General Hospital, churches, the Ministerial Alliance, civic organizations, the Department of Health, media, and others. All of these groups were able to focus on a common goal and parcel out the work among themselves. Even the ever-present turf battles disappeared after everyone focused on how they could best fit their organization’s role to suit the needs of the cause.

One of the biggest voices heard in the coalition were those of youth. The coordinator stated that this project has “created a huge kid movement in Socorro!” One of the ways young people got involved was through the STARS (Socorro Teens Reaching Students) peer education program. Another way that youth have become active is through the creation and use of “Youth Risk Interns” who are high school students trained to work with high-risk elementary kids. Seven young people were hired by the Coalition through federal abstinence education funds to serve in this key program. This program provides opportunities for youth development as well as important peer-to-peer education messages in the schools.

And there’s even more good news! Year to date, Socorro’s teen birth rate is now 19.2% -- a 58% decline and one of the lower teen birth rates in the state. In addition, the Council has been able to form a number of other groups to tackle other youth issues. Recently a Big Brothers/Big Sister chapter was formed, as was a youth prevention coalition. Socorro is an excellent example of what good things can happen when the community joins together to tackle its problems.
# HEALTHY PEOPLE 2000 HEALTH STATUS INDICATORS

**Health Status Indicators: US and New Mexico, 1992 and 1996**

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<tr>
<td>1 Race/ethnicity-specific infant mortality as measured by the rate (per 1,000 live births) of deaths among infants under one year of age</td>
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<td></td>
</tr>
<tr>
<td>a. All races</td>
<td>8.5</td>
<td>7.3</td>
<td>7.6</td>
<td>6.4</td>
<td></td>
</tr>
<tr>
<td>b. White</td>
<td>6.9</td>
<td>8.1</td>
<td>6.8</td>
<td>6.4</td>
<td></td>
</tr>
<tr>
<td>c. Black</td>
<td>16.8</td>
<td>14.1</td>
<td>14.1</td>
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<tr>
<td>d. Asian/Pacific Islander</td>
<td>6.6</td>
<td>9.8</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>e. American Indian/Alaska Native</td>
<td>12.8</td>
<td>5.2</td>
<td>9.8</td>
<td>9.8</td>
<td>1</td>
</tr>
<tr>
<td>f. Hispanic</td>
<td>7.6</td>
<td>8.1</td>
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<td>6.4</td>
<td>1,2</td>
</tr>
<tr>
<td>2 Total deaths per 100,000 population. (ICD-9 nos. 0-999)</td>
<td>504.5</td>
<td>491.5</td>
<td>478.3</td>
<td>470.3</td>
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<td>3 Motor vehicle crash deaths per 100,000 population. (ICD-9 nos. E810-E829)</td>
<td>15.8</td>
<td>16.2</td>
<td>25.8</td>
<td>26.3</td>
<td>3</td>
</tr>
<tr>
<td>4 Work-related injury deaths per 100,000 population.</td>
<td>3.2</td>
<td>2.3</td>
<td>4.7</td>
<td>3.5</td>
<td>4.5</td>
</tr>
<tr>
<td>5 Suicides per 100,000 population. (ICD-9 nos. E950-E969)</td>
<td>11.1</td>
<td>10.8</td>
<td>19</td>
<td>17.9</td>
<td>3</td>
</tr>
<tr>
<td>6 Homicides per 100,000 population. (ICD-9 nos. E990-E997)</td>
<td>10.5</td>
<td>8.5</td>
<td>10.8</td>
<td>11.6</td>
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<tr>
<td>7 Lung cancer deaths per 100,000 population. (ICD-9 no. 162)</td>
<td>39.3</td>
<td>37.9</td>
<td>25.3</td>
<td>24.2</td>
<td>3</td>
</tr>
<tr>
<td>8 Female breast cancer deaths per 100,000 women. (ICD-9 no. 174)</td>
<td>21.9</td>
<td>20.2</td>
<td>21.3</td>
<td>20.3</td>
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<tr>
<td>9 Cardiovascular disease deaths per 100,000 population. (ICD-9 nos. 390-448)</td>
<td>180.4</td>
<td>170.7</td>
<td>141.2</td>
<td>138.1</td>
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<td>Heart disease deaths per 100,000 population. (ICD-9 nos. 390-396, 402, 404-429)</td>
<td>144.3</td>
<td>134.5</td>
<td>105.8</td>
<td>103.4</td>
<td>3</td>
</tr>
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<td>Stroke deaths per 100,000 population. (ICD-9 nos. 430-438)</td>
<td>26.2</td>
<td>25.4</td>
<td>20.6</td>
<td>22.7</td>
<td>3</td>
</tr>
<tr>
<td>10 Reported incidence (per 100,000 population) of acquired immunodeficiency syndrome</td>
<td>31.2</td>
<td>25.2</td>
<td>12.6</td>
<td>12</td>
<td>4,6</td>
</tr>
<tr>
<td>11 Reported incidence (per 100,000 population) of measles (indigenous)</td>
<td></td>
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<td></td>
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<tr>
<td>a. Rate</td>
<td>0.1</td>
<td>0.2</td>
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<td>4</td>
</tr>
<tr>
<td>b. Number of cases</td>
<td>17</td>
<td>500</td>
<td>5</td>
<td>17</td>
<td>4</td>
</tr>
<tr>
<td>12 Reported incidence (per 100,000 population) of tuberculosis</td>
<td>9.8</td>
<td>8</td>
<td>4.6</td>
<td>5.2</td>
<td>4</td>
</tr>
<tr>
<td>13 Reported incidence (per 100,000 population) of primary and secondary syphilis</td>
<td>10.4</td>
<td>4.3</td>
<td>2.2</td>
<td>0.2</td>
<td>4</td>
</tr>
<tr>
<td>14 Prevalence of low birth weight as measured by the percentage of live born infants weighing under 2,500 grams at birth</td>
<td>7.1</td>
<td>7.4</td>
<td>7.2</td>
<td>7.5</td>
<td></td>
</tr>
<tr>
<td>Prevalence of very low birth weight as measured by the percentage of live born infants weighing under 1,500 grams at birth</td>
<td>1.4</td>
<td>1</td>
<td>1</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td>15 births to adolescents (ages 10-17 years) as a percentage of total live births</td>
<td>4.9</td>
<td>5.1</td>
<td>6.8</td>
<td>7.3</td>
<td></td>
</tr>
<tr>
<td>16 Prenatal care as measured by the percentage of mothers delivering live infants who did not receive care during the first trimester of pregnancy</td>
<td>22.3</td>
<td>18.2</td>
<td>30.8</td>
<td>30.1</td>
<td></td>
</tr>
<tr>
<td>17 Childhood poverty, as measured by the proportion of children under 15 years of age living in families at or below the poverty level.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. 5-17 years (U4,7)</td>
<td>20.8</td>
<td>18.9</td>
<td>18.8</td>
<td>32.2</td>
<td>4.7</td>
</tr>
<tr>
<td>b. (standard error)</td>
<td>-0.2</td>
<td>-0.5</td>
<td>-1.59</td>
<td>-4.1</td>
<td></td>
</tr>
<tr>
<td>18 Proportion of persons living in counties exceeding U.S. Environmental Protection Agency standards for air quality during the previous year</td>
<td>23.5</td>
<td>33.3</td>
<td>8.9</td>
<td>9.6</td>
<td>8</td>
</tr>
</tbody>
</table>

**Notes:**
- U1 – 1989-91 linked birth and infant death data.
- U2 – Hispanic origin can be of any race.
- U3 – Age adjusted to the 1940 U.S. standard population.
- U4 – 1993 data.
- U5 – Data are for people 16 years of age and older.
- U6 – By date of diagnosis. Adjusted for delays in reporting; not adjusted for underreporting.
- U7 – Related children in families.
- U8 – 1993 data based on 1990 census county populations.

**Data Sources for 1996 Data:**
1-3, 5-9, 14-16 National Vital Statistics System, CDC, NCHS
4 Census of Fatal Occupational Injuries, Department of Labor, Bureau of Labor Statistics
10 AIDS Surveillance System, CDC, NCHS
11-13 National Notifiable Disease Surveillance System, CDC, EPO
18 AIRS World Wide Web Data, Office of Air and Radiation, EPA

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Chapter 2: Determinants and Health Status • Twenty-First Century Health Care in New Mexico
Sources:


New Mexico Prenatal Care Network, University of New Mexico, Health Sciences Center, Department of Obstetrics and Gynecology (1998). Low Birthweight in New Mexico: A Retrospective Study 1990-1995.


Chapter 3:

HEALTH CARE DELIVERY SYSTEMS: AN OVERVIEW

SUMMARY

- There are three different levels of care and prevention in the health care delivery system: primary, secondary and tertiary. More visits occur at the primary level but there are still more specialty providers than generalists.

- Health care can be provided in a wide variety of settings but today, more and more care occurs in outpatient settings, although hospital utilization has not declined in New Mexico.

- A wide range of health care professionals provide the state’s health care needs and each profession has its own scope of practice which delineates what s/he can do.

- The supply of health care providers in the state has improved over the past 10 years but shortages still exist, especially in rural areas. Urban areas along the Rio Grande corridor have 66-75% of the state’s physicians and nurses.

- Rural areas face many barriers in attracting and retaining providers. To date, efforts have focused more on recruitment but now retention is beginning to receive attention. Recent surveys may provide data to assist in developing better strategies to get and keep rural providers.

- Despite recent headlines, the number of physicians in the state may not be dwindling. There is still disagreement about the reality of a “flight of physicians.” What is clear, however, is that there is strong evidence of problems with physician morale.

- Access to the health care system typically occurs as a result of having health insurance, which is most frequently provided by an employer (both public and private sector). 45% of New Mexicans have employer-provided insurance although the state has a low rate of employer-provided coverage.

- The type of insurance coverage and terms of the policy determine how one accesses the health care system.

- The percentage of uninsured adults (age 18-64) in the state has grown from 26% in 1990 to 28% in 1997.

- There are 2 major theoretical models of health care delivery: the structured and linear “Regionalized” model and the more free-flowing, market-based “Dispersed” model. They offer stark differences in their approach to how care is delivered.

- Key concerns around health care delivery are as follows: access to care for the uninsured, impact of managed care on patients and providers, overburden of paperwork on all parties, lack of planning and coordination, potential changes of nonprofit health care organizations to for-profit, long term care, rural-urban concerns, special needs populations such as the developmentally disabled and the mentally ill, and investor ownership of managed care and other health care organizations.
Understanding health care delivery systems can be somewhat like trying to sort through the pieces of a jigsaw puzzle. If you look at the different pieces individually, you might be able to see how the pieces interrelate but chances are unless you can see all of the pieces, you might miss the full meaning of the puzzle. With health care we tend to mix up the various parts of the system and call them by different names, which can lead to further confusion. To develop a rational health care system, it is important that we understand what we want from the system, how the system currently works and what we want to achieve from the system vis-à-vis health status. This chapter will outline the elements of the health care delivery system, raise issues of concern about these various parts, and help the reader to understand exactly what we are talking about when we discuss the puzzle of health care delivery.

WHAT KIND OF CARE?

There are three different levels of care that are provided in the health care delivery system: primary care, secondary care, and tertiary care. These levels of care refer to individual health care services, only. Population health, which focuses much effort on prevention, is the realm of the public health system. Primary care is the type of care that is provided for the most basic and common health problems such as upper respiratory infections, sprains, and hypertension as well as for preventive services such as immunizations and screening examinations. According to the Institute of Medicine’s report on primary care, the five important elements of primary care describe it as being accessible, comprehensive, coordinated, continuous and accountable. This level of care accounts for approximately 80-90% of visits to a health care provider on a national basis. Secondary care refers to more specialized clinical expertise and treatment such as surgery or treating a patient with acute renal failure as a result of diabetes, treating skin cancer, or evaluating a primary care physician’s concerns about a cardiac condition. The third level of care, tertiary care, involves highly specialized clinical treatment and rehabilitation services as well as management of rare and complex diseases such as pituitary tumors and congenital malformations. These services often involve highly sophisticated technology and are very expensive. Although these are the three commonly agreed upon terms, some organizations describe a fourth level or quaternary care which is superspecialized care such as heart/lung transplants, genetic surgery and bone marrow transplants that is typically provided by academic health centers.
These three levels of care can be represented by a pyramid in terms of the numbers of people served by each level, with the primary care level serving as the base and the tertiary or quaternary care level representing the apex. However, in the current U.S. system, there are far fewer primary care physicians than there are specialists and many believe that we have an oversupply. A recent study indicated that even if internists and pediatricians are included, only about one-third of the physicians in the U.S. can be classified as “generalists.” (Bodenheimer, 1998). More and more “mid-level providers” such as physician assistants, nurse practitioners and advanced practice nurses are filling the generalist gap left by physicians – a trend that is becoming more pronounced in rural areas and with managed care. Despite the current increase in importance of primary care, in this country there has been a tendency to believe that primary care is less important or skilled than more “advanced” care.

**Prevention**

In addition to these three levels of individual care, it is also important to consider preventive services. Prevention can also occur at the population-wide level. Although the differences can sometimes be confusing, the main distinction between clinical care and preventive services is that in the clinical care model, the person either actually has a disease or is at risk of having the disease. In prevention, which is frequently focused on larger populations, efforts are made to prevent disease from happening or to slow disease progression.

As in the levels of care, there are also three levels of prevention. **Primary prevention** is when the person does not have the disease and focuses on efforts to prevent or to reduce disease from occurring. This level of prevention includes immunizations, health education, seat belt use promotion, and the use of medication such as aspirin or hormone replacement therapy to prevent heart attacks or osteoporosis. Another type of primary prevention can be community preventive services or policies to support healthy behavior such as requiring child safety locks on guns. Primary prevention is the most important level because it targets large groups of people. Primary prevention occurs in health care settings but, more importantly through public health systems, schools, worksites, media, and communities where programs are set up to target the population at large who may very rarely enter a health care setting.

**Secondary prevention** has been defined as the early detection and treatment of disease. It includes many cancer screening activities such as pap tests, mammograms, prostate specific antigen (PSA) tests, and digital rectal examinations as well as other screening tests such as for newborns or for workers exposed to high levels of toxic materials. Disease may or
may not be present at this level but, if it is, there are no symptoms. While a clinical service, secondary prevention activities are also important to be designed as part of outreach efforts to target people who rarely receive health care services. At the third level of prevention, tertiary prevention, disease is present and almost always involves medical treatment. Here efforts are directed at “slowing disease progression, reducing risks of recurrences or complications, and prolonging life.” (Fairbanks & Wiese, 1998) Examples of this level of prevention include smoking cessation programs, cardiac rehabilitation programs, kidney transplants for individuals with end-stage renal disease, or use of medicines such as beta-blockers to reduce the risk of additional disease complications. Prevention is a key component of health care because of its contribution to lives, as well as dollars, saved.

**WHERE IS CARE PROVIDED?**

Health care can be provided in any number of settings. The older model of health care had most patient care taking place in a hospital, whereas today more and more care is occurring on an outpatient basis in doctors’ offices or outpatient clinics. In response to declining admissions, hospitals have had to re-engineer their services and have frequently become horizontally integrated or vertically integrated organizations which encompass a wide array of services. (Sultz, 1999) Health care can also be provided in a variety of community settings such as through outreach programs that take place in community centers, or at school-based health centers that care for the health care needs of young people in schools. More traditional settings for health care are long-term care facilities as well as home care, which is regaining its importance and use as more people are choosing to care for the elderly and infirm in a home-based situation instead of a long-term care facility. Other health care locations can be hospices, mental health facilities, local public health offices, pharmacies, or virtually anywhere there can be interaction between a health care provider and a patient.

Despite the fact that hospital admissions are declining in some parts of the country, hospital expenditures still account for the largest percentage of health care expenditures in New Mexico, according to the Health Policy Commission. Even though the total number of discharges has increased, the total number of patient days decreased between 1996 and 1997. The largest decrease in overall patient days between these two years was for the treatment of mental diseases and disorders. Based on data from the non-federal, licensed facilities in the state, utilization of New Mexico’s acute care hospitals has remained relatively constant since 1994, except for a slight decrease in the average length of stay for those over 65 years old. These non-specialty hospitals account for 90% of all hospitalizations in the state. In 1997 there were 65 hospitals licensed in the state – 11 federal and 54 non-federal facilities – which represents a decrease of 3 hospitals over the past 7 years. (HPC, 1999)
WHO PROVIDES THE CARE?

The person you see to receive health care may be anyone from a wide array of health care professionals: physicians, nurses, nurse practitioners, mental health workers, nurse midwives, respiratory therapists, dentists, physical therapists, optometrists, occupational therapists, audiologists, physician assistants, pharmacists, massage therapists -- just to name some. Each of these professionals has certain licensing and certification requirements that delineate his/her level of responsibility and authority in terms of practice. However, the system or setting in which the health care provider works or participates can also influence what the practitioner can do without seeking approval from another source. Physicians frequently call this the “locus of control,” and this issue of autonomy will be discussed later in this chapter.

Scopes of Practice

Each type of practitioner has his/her own scope of practice that is established by state statute. While these scopes of practice are fairly precise in defining what a particular health care professional can and cannot do, his/her practice is further regulated by a professional licensing board such as the Board of Medical Examiners or the Board of Pharmacy. To illustrate the types of educational requirements and scopes of practice for many health care professionals, the following chart is provided:

<table>
<thead>
<tr>
<th>Health care Professional</th>
<th>Education</th>
<th>Independent Practice?</th>
<th>Prescription Authority?</th>
<th>Other Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Osteopathic Physician (D.O.)</td>
<td>College degree, 4 years medical school; 1 year internship; additional training in comprehensive health care. Must pass national licensing examination.</td>
<td>Yes</td>
<td>Yes</td>
<td>Provide general health care with strong emphasis on prevention and holistic approach. Training provided in manipulation. Like allopathic physicians, they also specialize.</td>
</tr>
<tr>
<td>Allopathic Physician (M.D.)</td>
<td>College degree, 4 years medical school; 1-4 years residency. Pass national licensure exam. Additional exams depend on specialty.</td>
<td>Yes</td>
<td>Yes</td>
<td>Specialization is very common</td>
</tr>
<tr>
<td>Physician Assistant (P.A.)</td>
<td>Must complete a B.S. program and receive a P.A. certificate upon completion. Must pass a national certification exam</td>
<td>Work under supervision and direction of physician, sometimes away from direct daily contact</td>
<td>Yes</td>
<td>Provide wide range of medical care</td>
</tr>
<tr>
<td>Health care Professional</td>
<td>Education</td>
<td>Independent Practice?</td>
<td>Prescription Authority?</td>
<td>Other Notes</td>
</tr>
<tr>
<td>--------------------------</td>
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<td>-------------</td>
</tr>
<tr>
<td>Psychologist (Ph.D. or Psy.D.)</td>
<td>Must complete a doctoral program psychology along with 3500 hours of supervised experience. Must pass a national written exam and a state oral exam.</td>
<td>Yes</td>
<td>No</td>
<td>The observation, description, evaluation, interpretation and modification of human behavior for the purpose of preventing or eliminating undesired behavior and enhancing interpersonal relationships. Frequently specialize as either adult or child psychologist in addition to several different types of practice</td>
</tr>
<tr>
<td>Clinical Nurse Specialist (C.N.S.)</td>
<td>Must be R.N. and complete a C.N.S. program earning a Masters and pass a national certification exam in chosen specialty area.</td>
<td>Yes</td>
<td>Yes</td>
<td>Specialize; provide comprehensive care, perform complete physical exams, diagnose and treat illnesses, initiate therapy, manage acute and chronic conditions, provide consultation and expertise in selected clinical area of nursing.</td>
</tr>
<tr>
<td>Certified Nurse Midwife (C.N.M.)</td>
<td>Must be R.N. and complete a nationally accredited Masters or certificate program &amp; pass a national certification exam.</td>
<td>Yes</td>
<td>Yes</td>
<td>Provide gynecological and obstetrical services; specialize in care of healthy pregnant women and newborns; assist with childbirth</td>
</tr>
<tr>
<td>Nurse Practitioner (N.P.)</td>
<td>Must be R.N. and complete N.P. program &amp; pass a national certification exam in area of practice. Masters degree will be required for initial licensure after 1/1/2001.</td>
<td>Yes but collaborate as necessary with physician and/or other health professionals</td>
<td>Yes</td>
<td>Frequently specialize and practice is limited to scope of specialty area; provide primary care to meet the health care needs of individuals, families and communities in any health care setting; focus of primary care is on health promotion, health maintenance, prevention of illness and comprehensive management of acute and chronic health problems.</td>
</tr>
<tr>
<td>Registered Nurse (R.N.)</td>
<td>Must complete a board approved R.N. program (2 or 4 year degree or 3-year diploma) &amp; pass national exam</td>
<td>No</td>
<td>No</td>
<td>Frequently specialize; determine nursing &amp; health needs of patient; carry out prescribed medical &amp; nursing treatments; teach &amp; counsel patients &amp; families; observe &amp; report condition of patients to physician; direct &amp; supervise less skilled nursing personnel</td>
</tr>
<tr>
<td>Licensed Practical Nurse (L.P.N.)</td>
<td>High school equivalent; 1 year training in board-approved P.N. program &amp; pass national exam</td>
<td>No</td>
<td>No</td>
<td>Take &amp; record information about patient; dress wounds; perform simple diagnostic tasks; care for &amp; assist patients in variety of tasks</td>
</tr>
<tr>
<td>Dentist (D.D.S. or D.D.M.)</td>
<td>College degree, 3-5 years professional school; pass extensive exam</td>
<td>Yes</td>
<td>Yes</td>
<td>Frequently specialize in areas of dentistry such as oral surgery, orthodontia, periodontal, etc.</td>
</tr>
</tbody>
</table>

Continued next page
### Supply of Practitioners

An ongoing issue in New Mexico is the supply of health care professionals, particularly in the rural areas. A few statewide trends regarding practitioner supply should be noted here, although most of the providers are still in high population areas. According to data provided by the N.M. Health Policy Commission, there have been increases in the numbers of providers serving the state:

- Registered nurses (RNs) in the work force have shown the greatest rate of growth in relation to population, 46% for the five-year period. There were 542 RNs per 100,000 population in 1994, and in 1998 the rate was nearly 800 per 100,000.

- Since 1996, the rate of all allopathic physicians (MDs) per 100,000 population has increased 8% from 195 to 209 MDs per 100,000; however, the rate of osteopathic physicians (DOs) has remained relatively constant at 22 DOs per 100,000 population.

- Although the numbers are still small compared with other practitioners, the number of licensed mid-level providers -- allopathic and osteopathic physician assistants (PAs), nurse practitioners (NPs), and pharmacist clinicians -- has increased approximately 30% per 100,000 population in the past five years. In 1994 there were 30 mid-level providers per 100,000 and in 1998 there were nearly 40.

### Table: Health Care Professionals

<table>
<thead>
<tr>
<th>Health care Professional</th>
<th>Education</th>
<th>Independent Practice?</th>
<th>Prescription Authority?</th>
<th>Other Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental Hygienist (R.D.H)</td>
<td>Graduation from accredited dental hygiene program</td>
<td>Practice collaboratively with consulting dentist after certification</td>
<td>No</td>
<td>Serve as preventive oral health specialists providing educational, clinical and therapeutic services such as cleaning and applying sealants.</td>
</tr>
<tr>
<td>Pharmacist clinician (Ph.C.)</td>
<td>Must be a licensed pharmacist and pass a physical assessment course. Also must complete 150 hours of care for 300 patients with the supervision of a physician.</td>
<td>Practice under the supervision and protocol of a physician and/or other primary care provider.</td>
<td>Yes</td>
<td>Provide comprehensive care, perform complete physical exams, diagnose and treat common illnesses, and provide expertise with pharmaceuticals.</td>
</tr>
<tr>
<td>Pharmacist (Pharm.D. or R. Ph.)</td>
<td>Must have professional degree from approved school (PharmD=6 years) &amp; pass national examination; to qualify for exam must have at least 2,150 hours of practical experience in a pharmacy</td>
<td>Yes</td>
<td>No</td>
<td>Dispense medications prescribed by physicians and other authorized providers; counsel patients on use of prescription drugs and over-the-counter medications</td>
</tr>
</tbody>
</table>

Sources: A Lifetime of Opportunity: Careers in Health and information from specific degree programs and licensing boards
In the past year, the number of dentists licensed and residing in New Mexico has increased 5% relative to the state’s population and the number of hygienists has increased 8%. In 1997 there were 41 dentists and 36 dental hygienists per 100,000 population; in 1998 there were 43 dentists and 39 hygienists for the same population base.

### Number of Health Professionals per 100,000 population

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses RNs employed in NM</td>
<td>542</td>
<td>572</td>
<td>614</td>
<td>686</td>
<td>792</td>
</tr>
<tr>
<td>Physicians (Allopathic and Osteopathic)* Licensed and residing in NM</td>
<td>220</td>
<td>219</td>
<td>217</td>
<td>219</td>
<td>231</td>
</tr>
<tr>
<td>Mid-levels (licensed PAs, NPs and Pharmacist Clinicians)</td>
<td>30</td>
<td>30</td>
<td>31</td>
<td>34</td>
<td>39</td>
</tr>
<tr>
<td>Dentists* Licensed and Residing in NM</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>41</td>
<td>43</td>
</tr>
<tr>
<td>Dental Hygienists Licensed and Residing in NM</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>36</td>
<td>39</td>
</tr>
</tbody>
</table>

* includes specialists

**Source:** Health Policy Commission, 1999

### Provider Shortage and Misdistribution

Despite the fact that health care providers are one of the most important components of health care and the state has had increases in the number of providers, there is still a shortage in many parts of New Mexico. What does it mean to have a shortage of providers? Formulas have been developed to quantify these terms but, in essence, according to the federal Health Resources and Services Administration (HRSA), the following characteristics describe a **Medically Underserved Area (MUA)** and a **Health Professional Shortage Area (HPSA):**

- Low primary care physician-to-population ratio (sometimes as few as one physician per 10,000 people);
- High infant mortality rate;
- High percentage of the population below federal poverty level;
- Large percentage of the population over 65, and
- Excessive distance to primary care services.

The map at right illustrates what areas of the state are medically underserved.

The Health Policy Commission in its 1996 report, “Blueprint for Change,” described the efforts that had been undertaken to increase the supply of health care providers in the state. The report states that “despite [all of these initiatives and efforts], all or part of 31 of New Mexico’s 33 counties are desig-
nated as health professional shortage or medically underserved areas, by the federal government.” (HPC, 1996) Improvements have been made and today only 29 of the state’s 33 counties are designated as shortage or underserved areas.

**Where Are the Providers and Why?**

A key factor in looking at health care professionals is how they are distributed throughout the state. Like most other health care resources, there is a misdistribution of providers between the urban and rural areas of the state. According to the Health Policy Commission, in 1996, 74% of all non-federal licensed physicians and 66% of all registered nurses were located in the metropolitan statistical areas of Santa Fe, Albuquerque, and Las Cruces along the Rio Grande corridor. With the majority of practitioners serving these urban areas, rural New Mexico is left in a crisis situation.

New Mexico is the sixth lowest in the U.S. in population density. Only seven cities in the state have populations over 30,000 – Albuquerque, Las Cruces, Santa Fe, Rio Rancho, Roswell, Farmington and Clovis. These cities made up 42% of the population in 1996 (727,705/1,713,407). (DOH, 1998) However, 42% (1500/3500) of the state’s physicians practice in Albuquerque alone and 18% practice in the remaining urban areas. (Bennett, 1995) Thus, while 58% of the state’s population lives outside of the seven cities listed, only 40% of the physicians practice outside of these urban areas.

The map at right lists by county the number of physicians that are licensed to practice in New Mexico per 1,000 population. Note that the county refers to the physician’s residence, which is not necessarily where s/he practices.
Rural areas have a unique set of barriers to overcome in attracting and retaining providers. In 1998, the Health Policy Commission commissioned a study by the University of New Mexico’s Institute for Public Policy to identify and assess key factors in the recruitment and retention of health care professionals for rural areas of the state. The study was limited to general physicians, general dentists, physician assistants, nurse practitioners, and registered nurses. Results include identifying a number of statistically significant characteristics associated with whether a provider had practiced in a rural area, which are key factors in recruitment. These characteristics (and the practitioners it applied to) are as follows:

- growing up primarily in a rural environment (physicians, dentists, and registered nurses);
- working with underserved populations (all groups);
- appeal of living in a rural environment (physicians, dentists and registered nurses);
- importance of having access to locum tenens (physicians); and
- having acquired a rural service obligation (all groups).

Characteristics positively associated (and statistically significant) with rural retention include:
- growing up primarily in a rural environment (physicians, dentists, and registered nurses);
- being male (physicians and dentists);
- working with underserved populations (physician assistants and nurse practitioners);
- appeal of living in a rural environment (all groups except physician assistants);
- having acquired a rural service obligation (physician assistants);
- satisfaction with the working environment (all groups); and
- satisfaction with the living environment (physicians and dentists).

In addition to this quantitative study, the providers were also asked five open-ended questions which allowed participants to respond in their own words (as opposed to choosing among a limited set of options as described above). Interestingly, many of the reasons cited for entering rural practice were also reasons cited for not considering or entering a rural practice. Providers were also asked about what bothered them the most about practicing in a rural area. On the next page is a synopsis of the survey results:
### Top Three Categories of Responses to Rural Recruitment Questions*

<table>
<thead>
<tr>
<th>Providers</th>
<th>Main reason you decided to enter rural practice</th>
<th>Main reason you have not considered practicing in a rural area</th>
<th>Main reason you decided not to enter rural practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Physicians</td>
<td>Community (25%) Attitudes (21%) Lifestyle (20%)</td>
<td>Infrastructure (23%) Lifestyle (18%) Community (16%)</td>
<td>Family Ties (28%) Infrastructure (15%) Community (15%)</td>
</tr>
<tr>
<td>General Dentists</td>
<td>Community (44%) Lifestyle (26%) Economic (10%)</td>
<td>Economic (28%) Community (25%) Lifestyle (16%)</td>
<td>Economic (33%) Family Ties (21%) No Rural Oppty (14%)</td>
</tr>
<tr>
<td>Physician Assistants</td>
<td>Community (30%) Attitudes (26%) Lifestyle (23%)</td>
<td>Lifestyle (36%) Family Ties (29%) Community (19%)</td>
<td>Economic (23%) Infrastructure (19%) Family Ties (19%)</td>
</tr>
<tr>
<td>Nurse Practitioners</td>
<td>Attitudes (40%) Community (38%) Lifestyle (16%)</td>
<td>Lifestyle (32%) Family Ties (29%) Prof. Concern (19%)</td>
<td>Family Ties (28%) Community (21%) No Rural Oppty (14%)</td>
</tr>
<tr>
<td>Registered Nurses</td>
<td>Community (52%) Lifestyle (14%) Family Ties (10%)</td>
<td>Lifestyle (34%) Family Ties (26%) Community (9%)</td>
<td>Family Ties (31%) Community (17%) Economic (14%)</td>
</tr>
</tbody>
</table>

*Definitions of Categories for Rural Recruitment & Retention Survey*

**Attitudes:** Attitudinal preferences for and against practicing in an underserved area. It also includes preference for a particular kind of practice, or variety and autonomy in practice.

**Changing Conditions:** A wide range of changing administrative and bureaucratic issues. Some providers changed the focus of their practice, so it became non-rural. Other providers had a service obligation, job contract, or other program that ended. Other providers were reassigned or decided to serve in a rural area as a volunteer or temporary replacement. Finally, some served only as a condition for maintaining U.S. immigration status.

**Community:** Relationships between feelings about a community and its people, and how these factors influence the decision about where providers practice. Included in this category are ties to a particular environment, marriage opportunities, ties to certain racial, ethnic or linguistic communities, as well as personal relationships with other health care professionals in a community.

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*Continued on next page*
Definitions of Categories for Rural Recruitment & Retention Survey Continued

Economic: Various financial or income-related issues that affected providers’ decisions about where they practice. Includes compensation or income, professional opportunities, patient base or need, debt, and start-up costs or amounts needed to purchase a practice.

Family Ties: Familial issues that influenced providers’ choices of where to practice. Includes obligation to parents, spouse, and children, as well as needs related to spouse’s employment.

Infrastructure: Various needs in terms of overall resources that providers consider important to a successful practice. Included are professional services, support, equipment, technology, and facilities.

Lifestyle: Quality of life issues that are individual and personal, as well as those which are related to the overall work environment. Included in this category are personal quality of life, city activities, outdoor activities, personal health, and professional lifestyle, such as wanting to live near and know the people served.

No Rural Opportunity: Situations in which a rural opportunity was sought or would have been preferred, but where no opportunities to serve in a rural environment were found. Includes not being accepted into a service program, no established practice or employment opportunity available, termination, the desired situation filled by another, and the difficulty of switching from an established urban practice to a rural setting.

Professional Concerns: Various bureaucratic factors and perceived characteristics of the rural population served. Includes concern over practice administration, government and regulatory issues, difficulties with HMOs, insurance regulation and reimbursement, difficulties with patients, and limited opportunities for rural practice within some specialties.

Recruitment and Retention

Many programs have been developed to deal with this critical shortage of health care professionals in the rural parts of the state. Recruitment and retention have been the dual goals of these efforts but historically there has been more emphasis on the recruitment side of the equation. Efforts to address retention are now underway and include a conference in Fall 1999 for community members as well as health care administrators to look at broader issues in retention including economic development for small communities. It is becoming clear both to communities and to recruiters that the community has a key role to play in both recruitment and retention. As is the case with so many other efforts in rural communities, without the involvement of influential and active community members, the success of an effort is in question.

In 1996, Senate Joint Memorial (SJM) 36 requested a study of options to address the supply and distribution of health care professionals in the state. According to the report issued in response to this memorial, there are over twenty distinct publicly funded or affiliated initiatives underway in the state. There have been a variety of loan programs including loans for service for allied health professionals, the New Mexico Health Service Corps, and the New Mexico loan repayment program. Another program that was developed to help in rural areas is the UNM locum tenens program, which provides coverage for physicians in rural areas to offer a break from their practice for a period of time for continuing education or personal reasons. In its 6 years of existence, this program has provided over 10,000 days of practice relief, 75% of which were in rural and medically underserved areas. Twenty-five providers in the program have been recruited to the site where they provided coverage.

The SJM 36 report stated “the majority of these programs are associated with or administered by the Commission on Higher Education, the Department of Health, or the University of New Mexico Health Sciences Center. Additionally, New Mexico Health Resources, Inc.
has a long standing presence in the placement and retention of health professionals in rural and under served areas. A significant portion of the funding for the recruitment and retention programs came from outside the state (45.4% from the federal government and 7.4% from private grants based on SFY 1996).” Nearly $8.1 million was spent in state fiscal year 1996 on these programs with 47% of the funds coming from state coffers. In addition to these public funds, private health care organizations are also involved in recruiting for providers but no estimates for these expenditures are available.

A Flight of Physicians?

Recent news accounts indicate that a new problem may be developing that could affect the supply of physicians in the state. Reports of physicians leaving the state or retiring early have become widespread and have been fueled by the departure of some prominent doctors. Frequently the stated reason for their departure is that they dislike managed care and its constraints on their practice. In a recent interview, the chair of the New Mexico Medical Society’s (NMMS) ad hoc committee looking at physician manpower in the state indicated that doctors “are leaving because they can’t make ends meet under managed care and the paperwork is simply too much for them to bear.” (Traver, 1999) To explore some of the underlying issues around this problem, the NMMS will be conducting an opinion poll of 800 physicians to assess their views of the current practice climate in the state later in 1999.

Headlines like “More Doctors Leaving N. M., Group Says” (Albuquerque Journal, 1/1/99) and “Doctor Exodus Feared” (Albuquerque Journal, 4/18/99) have startled members of the medical community as well as consumers who fear there will be too few physicians even in the urban areas of the state. Concern about this trend has spurred study by both the American Medical Association (AMA) and the New Mexico Board of Medical Examiners (BME) to get a handle on the actual number of physician losses. There are differences in the results of the two studies. The AMA preliminary estimates state that between 18 and 35 doctors are leaving the state each month. However, BME disagrees with this analysis and indicates that the AMA is counting many physicians that aren’t available to the general public such as Residents, military and Public Health Service physicians. (LaFarge, 1999) According to BME data, the state is gaining physicians every year (see chart next page).

Physicians Licensed in NM
Calendar Years 1990-1998
Although the data show a raw increase in the numbers of physicians, there is still disagreement about the reality of such a flight and it deserves additional close study. What is clear is that there is strong evidence of problems with physician morale as evidenced by discussions at medical society meetings and listservs. Much of the frustration focuses on the implementation of managed care.

Where do physicians go when they leave New Mexico? Although there is no statewide tracking system, discussions with those who observe these movements provide some anecdotal perspectives. Texas seems to be the place that the largest number of physicians leaving the state go and Texas has neither a gross receipts tax nor an income tax – both of which New Mexico has. The second leading contender is the Pacific Northwest – Oregon and Washington. People seem to want to go there because of lifestyle concerns – they are looking for a place that is even more rural than New Mexico. Next is the New England area – many people seem to be returning to their home communities. Another more general place is where the person did her residency – the physician may return to New Mexico to fulfill her loan obligation but then return to the place where her professional ties were first established. (J. Harrison, Personal communication, September 16, 1999)

**HOW DO PATIENTS GET INTO THE SYSTEM?**

“Access” to health care is a critical topic. In interviews with a variety of New Mexicans about health care, the most pressing concerns include:
• Can people without medical insurance receive the care they need?
• Does having insurance mean getting health care or, conversely, does not having insurance mean not getting health care?
• Can people in rural communities receive adequate care locally?
• How can people working for (often small) companies that do not offer insurance have access to affordable insurance?
• How can providers and health care professionals insure that the care delivered is culturally and geographically appropriate?
• Does managed care limit access?

An integral part of access is payment systems and, although health care financing is covered in detail in Chapter 4, there are some references to insurance and payment type throughout this section.

Patients seek care when they have a perceived need for health care whether or not they have health insurance. More than half of all New Mexicans age 19-64 access the health care system by virtue of having employer-sponsored health insurance. However for those who do not have health insurance and who meet certain age, disability or income qualifications, they can be covered under either government-funded Medicare or Medicaid and receive their medical care through one or possibly both of these programs. Seven percent of New Mexicans purchase private insurance on their own. A large and growing group of the population is the uninsured. This population tends to be employed but frequently works in small businesses that may not be able to provide health insurance to employees.

As noted above, employer-provided insurance is the primary means of health coverage for most New Mexicans. Most people believe that private employers are the source of this insurance but, in fact, current definitions of health insurance overemphasize the role of private employers. A recent study of the role of private employers in providing health insurance found that figure to be overstated because it has typically included persons not truly employer-covered such as those whose primary coverage was a government insurance such as Medicare, government employees whose private coverage was funded by the government, or employees who purchased their insurance through employer-arranged but non-contributing plans. Based on...
data which reallocates those individuals into a more appropriate category, New Mexico has the lowest rate of private employer-provided coverage in the nation. (Carrasquillo, 1999)

According to preliminary results of a household survey conducted in 1999 by the UNM Institute for Public Policy for the Health Policy Commission, 68% of those adults employed in 1998 were offered health insurance through employment. Nearly 80% of those offered insurance enrolled but for those who did not enroll, their reasons included the following: coverage obtained through another program, coverage provided through a spouse/family member’s policy, or couldn’t afford the plan offered.

Who are the Uninsured?

The uninsured are with us in even greater numbers than they were in 1990. In 1990, 26% of adults ages 19-64 had no health insurance in New Mexico; and in 1997, the number has increased to 28%. The state has one of the highest uninsured rates in the nation, ranking 2nd in a health care coverage ranking compiled by American Association of Retired Persons (AARP) in 1998. The graph below shows how the number of uninsured has fluctuated over the past 8 years. A person without insurance typically will only seek care in an emergency situation and will frequently seek treatment in an emergency room where he/she cannot be denied care because of inability to pay.

The uninsured tend to be the working poor. As is the case in the U.S., most uninsured adults in the state are employed. According to the Urban Institute, of all non-elderly uninsured adults, nearly 86% were in households with an employed adult. Not surprisingly, the poor also tend to be uninsured. Nearly half of all adult New Mexicans in families below 200% of the Federal Poverty Level (FPL) were uninsured. This is in contrast to only 14% of adult New Mexicans in families at or above 200% of the FPL. The designation of 200% of the FPL is equal to $33,400 for a family of 4. The most recent Census data also reports that nearly 45% of the uninsured under age 65 were in two-parent families. For children, we have seen some improvements from 22% in 1990 to 20.1% today. With the advent of the State Children’s Health Insurance Program, it is likely that the number of children that have no coverage will decrease.

The primary reason that New Mexicans are uninsured is cost. Results from the HPC household survey report that 38% of those without health care coverage in 1998 stated the
primary reason they were without coverage was that they couldn’t afford it. Twenty percent stated that their employer did not offer coverage and nearly 10% were uninsured because they lost or changed jobs. Fifty-eight percent of respondents indicated that they would get health insurance if they could afford it. For children, nearly 18% of respondents said that their children were either not covered in 1998 or were covered for only part of the year. Here again, the most common reasons given for lack of coverage for children were cost (38%), changed or lost job (8%), or their employer didn’t offer family coverage (8%).

**Traditional Insurance**

The type of insurance coverage and the terms of the policy determine how one accesses the health care system. If a person has an indemnity policy that has no restrictions on whom s/he can see, then the person can go to any physician or health care provider. With this type of insurance coverage, the patient pays the provider and submits his/her bill to an insurance company. Then the insurance company reimburses the patient, conditional on the terms of the benefits package and after adjustments for deductibles or co-payments. Another payment arrangement is when the provider is paid on a fee-for-service (FFS) basis meaning that the provider bills the insurance company for the services provided and is reimbursed for those services.

According to the Health Insurance Association of America, most fee-for-service plans reimburse providers at 80% of the reasonable and customary charge, and the patient pays the difference. This type of traditional health care payment is rapidly disappearing in the U.S. In a comparative study done by the HayGroup for the National Association of Psychiatric Health Systems and the Association of Behavioral Group Practices (April 1999), in 1987 employers reported that 92% of the plans they provided were fee-for-service plans. In 1998, only 14% of these plans were FFS.

Fee-for-service payment systems were determined by the “market.” When physicians and other providers could not recoup expenses from insurance companies, they simply charged consumers the difference. The impact of such a system on access was dramatic: as medical technology developed, doctors ordered many more tests for patients and engaged in procedures that some argued were wasteful and unnecessary. For poor patients without insurance, physicians shifted the cost of their care to those with commercial insurance or those that could pay. As a result of all of these actions, costs escalated.
Managed care

More and more insurance plans fall under the category of managed care plans. Managed care is defined here as a system of health care delivery that influences the utilization and cost of services and measures performance. (See other definition in Chapter 4.) A variety of types of plans can be defined as being under the managed care umbrella. The type of insurance plan most frequently identified with managed care is the health maintenance organization (HMO). Although there are several different models of HMOs (Independent Practice Association; staff, group, network, and mixed models HMO), HMO is defined here as an organization that requires members to receive care from providers within that HMO except in an emergency situation. Payment to providers in non-staff model HMOs is typically characterized as a “more tightly bundled unit of payment” and can include per diem, capitation or salary. (Bodenheimer, p. 48) Staff model providers are typically paid a salary.

One of the hallmarks of the HMO system is having the primary care physician (PCP) manage the care of its members. Thus HMOs require the member to choose a PCP to coordinate the patient’s care and serve as the manager, sometimes referred to as the “gatekeeper,” for all medical services by being the source of referrals to specialists or other providers. The American Hospital Association (AHA) defines the role of the PCP as being “the first line of defense in health care; a primary care physician is usually a family practitioner, pediatrician, obstetrician/gynecologist or internist.” In New Mexico, nurse practitioners, physician assistants, and nurse midwives frequently act as PCPs. The Institute of Medicine goes on further to define primary care as being the “provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients and practicing in the context of family and community.” (Institute of Medicine, 1996)

In the HMO arrangement, the provider or group of providers typically agree to take a negotiated per capita payment, or capitation, which is a flat fee payment made usually on a monthly basis to cover the services required by the insured person. These payments are typically known as “per member per month” (pmpm). Depending on the arrangement between the HMO and the provider, there is usually some financial risk for the cost of the patient’s care transferred to the physician. The capitated rate is a flat rate that is paid whether or not the services are used and may, depending on the contract between the provider and HMO, cover other services or parts of services in addition to primary care (i.e. lab tests, ancillary services, specialty care, hospitalization). The purpose of this type of payment arrangement is to give providers incentives to manage resources efficiently. (Knickman, 1995)

Although capitation isn’t a universal feature of HMOs, it is becoming much more dominant. A recent study found that “in markets with high HMO penetration, capitation is the method of paying primary care physicians for 63% of enrollees. For 46% of HMO enrollees in large markets, specialists are receiving capitation checks as well.” (Bodenheimer, p. 63) In New Mexico, some specialists are capitated but the majority of capitation payments are made to PCPs. Some states, such as California, have moved further into capitating specialists.
Another example of a managed care plan is the preferred provider organization (PPO) which requires that an individual choose a provider that is part of a group of participating providers. These providers have agreed to be part of this plan and will receive a negotiated payment for services rendered. Typically as long as the provider that a person chooses to see is part of the PPO, the type of provider (i.e. specialist or generalist) doesn’t matter under this plan and there is no requirement for having a PCP. If an individual chooses to go to a provider that is not part of the PPO, the consumer typically has to pay a higher co-payment in addition to what the insurance plan covers. PPOs can be described as a being a hybrid between a HMO and an indemnity plan. The third type of managed care plan is the point-of-service (POS) plan which requires an individual to have a PCP but allows the member to receive health care from any provider of choice. Co-payments or deductibles are based on whether or not a provider is a part of the plan.

**HOW IS CARE ORGANIZED?**

The final piece of the puzzle brings us to the issue of how health care is organized and thus, how care is delivered. Although the reality of most health care systems is that they tend to be a hybridization of models, two primary theoretical models of health care systems have been identified: the structured and linear Regionalized Model and the more free-flowing Dispersed Model. Based on the work of health care policy experts Bodenheimer and Grumbach, the following describes the primary features of each of these models:

The Regionalized Model is highly structured and is organized around defined geographic areas where health care is organized and coordinated. This model of health care provides staff and facilities on the basis of population and formulas developed to support the three levels of care: primary, secondary and tertiary. Primary care is clearly emphasized in this model and patients are expected to be seen through their primary care provider before moving on to see a specialist. Examples of this model are many U.S. HMOs and the National Health Service (NHS) in Great Britain. To illustrate this model, here is how care is provided in the Britain’s NHS:

- For physician services, the primary care level is virtually the exclusive domain of general practitioners (commonly referred to as GPs), who practice in small- to medium-sized groups and whose main responsibility is ambulatory care. Two-thirds of all physicians in the United Kingdom are GPs. [Ed. Note: Some critics note that specialists historically have drained resources from the British NHS through the use of public hospitals for private practice and other benefits written in to the development of the NHS to mute resistance from specialists. The famous dictum from the NHS founders about specialists was that they “stuffed their mouths with gold.”]

- The secondary tier of care is occupied by physicians in such specialties as internal medicine, pediatrics, neurology, psychiatry, obstetrics and gynecology, and general surgery. These physicians are located at hospital-based clinics and serve as consultants for outpatient referrals from GPs, in turn routing most patients back to GPs.
for ongoing care needs. Secondary-level physicians also provide care to hospital-
ized patients.

- Tertiary care sub specialists such as cardiac surgeons, immunologists, and pediatric
hematologists are located at a few tertiary care medical centers.

- Hospital planning follows the same regionalized logic as physician services. GP
groups provide care to a base population of 5,000-50,000 people depending on the
number of GPs in the practice. District hospitals are local facilities equipped for basic
inpatient services and have a catchment area of 50,000 to 500,000. Regional tertiary
care centers handle highly specialized inpatient care needs [and cover a population of
500,000 to 5 million].

(Bodenheimer, pp. 79-80)

The Dispersed model is best demonstrated by the traditional U.S. health care organiza-
tion. This model is characterized by little structure or hierarchy, and reflects the American
culture of independence. The patient base for the dispersed model is accustomed to self-
referring and entering the system at whatever care level s/he chooses. The model can also be
described as having unregulated (either by the government or a private entity) distribution of
providers and services that is driven by both provider preferences and market demand.

The result of this model is that physicians in the dispersed model have less clearly defined
roles than do physicians in the regionalized model. According to Bodenheimer and Grumbach,
primary care has become woven into the practices of specialists. “This diffuse approach to pri-
mary care was partly born out of necessity, as only 13% of physicians in the United States are
general or family practitioners. The relative decline of these practitioners has been a steady trend
since 1940, when three-fourths of physicians were GPs….To fill the primary care gap, some
physicians at the tertiary level in the United States have also acted as PCPs for many of their pa-
tients. Studies in the 1970s indicated that nearly 20% of persons in the United States relied on a
nongeneralist physician for their principal care.” (Bodenheimer, p. 81)

Hospitals, too, don’t follow a regulated distribution plan as is prescribed by the regional-
ized model. With the disappearance of certificates of need and other health planning pro-
grams of the 1970s, hospitals are quite autonomous and can expand and/or contract as they
see fit. A good example of this is the entry of a new stand-alone heart hospital in Albuquer-
que that will compete with existing heart programs offered by two other hospitals. Addition-
ally, hospitals are free to duplicate equipment and services such as high tech diagnostics like
magnetic resonance imaging (MRI) and transplantation programs as long as the market will
support these services.

These two models offer stark differences in their approach to how care is delivered.
Which of them is right? Which model offers the best and most rational approach to deliver-
ing health care to a given population? When this debate is engaged, a variety of answers
emerge depending on one’s perspective. People that prefer an integrated, more controlled
approach would tend to support the regionalized model, whereas people who prefer a market-
based approach and complete freedom of choice for providers would tend to support the dis-
persed model. With recent experiences that some people have had with HMOs, there is a feeling that the regionalized model puts too many hassles and barriers to care in the way of the patient. However, complaints have also been leveled at the dispersed model saying that it encourages patients to “doctor hop” by going from specialist to specialist to get the diagnosis or medical opinion (and possibly prescription drugs) that they are looking for without anyone coordinating or overseeing the patient’s care. Obviously there are advantages and disadvantages of either system and the challenge is to find the solution(s) that work best for a given population with its unique challenges.

The Health Care Paradigm

Much of health care service is based upon scientific theories and knowledge. There are numerous theories that exist regarding the delivery of health care in the U.S. and the theory, or paradigm, governing the delivery and financing of health care is undergoing intense scrutiny. In the United States, we have not come to terms with whether health care is a social good or a market commodity. We have a fragmented system that varies between states, regions and individual cities and communities. Health care is resource intensive both from the perspective of the personnel required to deliver the service, as well as the technology of the interventions and treatments.

For decades, modern cures such as penicillin for pneumonia showed great promise that practitioners would be able to cure disease by understanding the molecular level of effective intervention. This “Reductionist Biomedical Paradigm” minimizes the "art" of medicine (interpersonal skills, therapeutic relationships), fails those patients with incurable diseases, and ignores the suffering of chronic illness both on the individual and the family. The “Biopsychosocial Paradigm” balances the interface between culture and belief, physician strategies, the biologic mechanisms causing the health problems, and the skills essential in the ongoing care of chronic disease.

The “Population-Based Health Paradigm” provides new skills that enhance the traditional medical model with those of the other important determinants of health including economic, population, behavioral, dental, and social services. It also promotes health and prevents disease by encouraging behavioral change (e.g. regular exercise, more balanced nutrition) and altering risk factors (controls diagnosed conditions such as high blood pressure or diabetes). The population-based paradigm is a model that spans some of the inconsistencies and gaps, and aims for a more rational, fair financing and delivery system for health care. But perhaps what is needed is a completely new theory that requires a different set of skills including the abilities to: manage information, work in a team, integrate clinical guidelines and judgement, manage outcomes and manage resources along with blending the art and science noted above. (Bulger, 1998. pp. 81-85)
Concerns Raised About Health Care Delivery System

In interviewing a variety of people for this document, several key concerns were repeatedly raised. The first concern was that access to health care is difficult for many people in New Mexico and that there is a sense that it is becoming worse. As noted before, access means different things to different people; but in this case, it refers simply to the ability for people to get medical care. Although there have been improvements in the supply of primary care providers in the state over the past 10-20 years, the difficulty is getting access to those without cash or insurance. Even with public programs such as Medicaid, the fee schedule has not been updated for 20 years. Many providers can’t care for Medicaid patients because it costs them more to care for patients than they are reimbursed.

With the advent of managed care and greater controls on costs, opportunities to cost shift to provide care for the uninsured are vanishing. There are also barriers to care that persist in the state, especially in rural areas: cultural barriers, language, transportation, and geography. These barriers seem to be as deeply embedded today as they were 10 years ago despite a number of efforts to remedy them such as training to improve cultural competency of providers, increasing the number of interpreters, and providing additional transportation services.

A concern that is becoming more strongly expressed is that of investor ownership of health care organizations and potential for conflict of interest. As health care becomes more of a for-profit undertaking, questions have been raised about whether decisions are being made in the patient’s or the investor’s best interests. A recent comparison of nonprofit and for-profit HMOs found that investor-owned plans had lower rates of quality of care than nonprofit HMOs. (Himmelstein, 1999) Other questions around the issue of for-profit vs nonprofit include: What are the impacts of the shift to greater “corporate-ization” of health care? Is efficiency increased? Are important services lost when health care organizations become for-profit?

A less global concern, but a related issue, is that of the conversion of nonprofit health care organizations (such as hospitals or health plans) to for-profit entities. The sale of nonprofit health care organizations is growing in the U.S. and the issue has surfaced in New Mexico with the sale of a number of nonprofit or publicly owned hospitals and the potential sale of a non-profit insurer, Blue Cross/Blue Shield of New Mexico. Conversions raise questions about how to protect the community’s interest in the local hospital, both in terms of the community’s contributions of time and money to start and/or sustain the facility as well as the people’s interest in the services provided by the hospital. There is also a concern about local control and the relationship of the public to the facility, which arises when a community hospital changes status and is owned by investors and operated by off-site administrators.

Consumer advocates have brought these concerns to the policy arena and cite existing law that nonprofit assets should not be distributed to a private, for-profit entity. Legislation was introduced in the 1999 state legislative session that would address the issues surrounding conversions, but the legislation failed. Recent news that a nonprofit hospital in Las Vegas, Northeastern Regional Hospital, is close to being sold to a for-profit company has sparked additional interest in this type of legislation.
One of the major fears about managed care that is reflected both from talking with people and in the media is that necessary care is being withheld from patients to save money. Anecdote after anecdote are offered that cite where a patient has been denied a procedure or was required to go through enormous amounts of paperwork or the provider was prevented from offering a treatment (“gagged”) because of the HMO’s desire to contain costs. Once again, depending on whom you talk to, you will hear evidence that both confirms and denies these charges. These concerns and fears about treatment being sacrificed for cost are at the heart of patient protection legislation that is being debated in Congress and was passed in New Mexico in 1998.

A related concern is expressed by many physicians now faced with working in a managed care setting. They believe that there are too many people, especially people without the same level of clinical training that they have had, second-guessing their medical judgements. Physicians are not accustomed to having to receive approvals for procedures and, in this new environment, prior authorizations can be required for a treatment plan to move forward. Physicians feel that their professionalism and autonomy as health care providers are being compromised by what they see as a purely economic enterprise. These feelings of being watched-over are exacerbated by a number of concerns: many physicians’ dislike of capitation which they believe rewards limiting necessary care, denial of claims submitted for lack of “prior authorization,” and substantial delays in payment. As a sign of this discontent, the AMA recently voted to explore developing a physicians’ union.

Underlying many of these aforementioned issues is a general concern about the impact of managed care on health care as we know it. Many people believe that managed care cannot work and many believe that in its current form it doesn’t work. Just as many strongly believe that it is a rational system that interjects order and reason into a currently chaotic health care environment and saves lots of money. Some express a mixed view of managed care: they feel that it offers an opportunity to truly manage care through case management that cannot be done in a fragmented system but, as currently operating in New Mexico, it conforms too closely to the medical model to adequately deal with complicated and interdependent behavioral and physical symptoms and illnesses. For example, a patient with limited English proficiency is required to see a provider who doesn’t speak her language or understand her culture, while there may be a more appropriate provider who is unavailable to her because he is not in the HMO’s network, then the patient will not be well-served. Another example is a patient with multiple chronic disease diagnoses (i.e. asthma, diabetes and high blood pressure) who also has a mental illness and is unemployed—how can all of these complex factors be handled in a linear medical model?

Everyone complains about the amount of paperwork required in today’s health care environment. Patients, especially the elderly, feel overwhelmed by the “red tape” they have to endure to get care or reimbursed. An advantage of managed care plans for patients is this there fewer forms to complete but the paperwork burden has been shifted to the provider. Providers too say there are so many forms to fill out and that each insurance company or other payer has a different process of submitting bills and reports. A common complaint is
that providers spend so much time filling out paperwork or on the phone getting authorizations that they have less time to spend with patients. Many physicians have advocated some type of universal billing system to standardize the current patchwork quilt of forms required for payment. Hospitals and clinics also face a wall of paperwork because of the different reporting requirements that they have to meet depending on the agency requesting the information such as the Joint Commission on Accreditation of Health care Organizations (JCAHO) or a state regulatory agency. Even health insurance companies have a vast number of reporting requirements, some of which require the same information presented in different ways. Striking the balance between necessary accountability and burdensome redundancy can be difficult.

Other concerns about the delivery system speak to the lack of planning and coordination that exists within the state’s health care system. Several people cited the fact that the lack of planning and overall coordinated effort has resulted in a “non-system” because there is no logic in the way we deliver health care. These concerns raise as an option a return to health care systems planning that was tried in the 1970’s and 1980’s where certificates of need and other planning mechanisms helped establish priorities within the delivery system. More recent experience with health care planning has gone beyond the siting of hospitals or MRI equipment, and has moved into determining what types of benefits are available to populations. After a great deal of public dialogue, Oregon developed a plan that determined what types of benefits would be provided to recipients of publicly funded health care. This type of planning calls for a clear discussion of where these decisions and plans occur – should it be at the Federal level? State level? Local level? Who should be making decisions about these issues?

A major though often neglected and unsupported resource in the health care delivery system is the nonprofessional caregiver. These caregivers have been defined as “…the unpaid relatives, partners, or close friends who either provide direct care and emotional support to, or manage the health care of, those who are chronically ill or disabled.” (United Hospital Fund of New York, 1998, p. v) Each year more than 60 million Americans are admitted to or discharged from health care facilities, and in any given year, approximately 26 million non-professional caregivers provide nearly 200 billion dollars worth of uncompensated care. These caregivers assume significant care responsibilities and are a valuable but vulnerable resource. Public and private insurance plans and managed care organizations should evaluate benefits and service plans to reflect the importance of training, supporting, and communicating with family caregivers. (See additional discussion of this topic in Chapter 5)
There's a huge conflict between what’s in the best interests of the individual patient and what is in the best interest of society.

– INTERVIEWEE

A final concern about the current health care system is that of the impact of technology on the delivery of care. Technology has played a dramatic role in improving outcomes for many diseases but it is also a major factor in high and increasing health care costs. How do we determine when they are best used? How do we balance cost and benefit in making these decisions? Who decides when these technologies are appropriately used? For example, is it appropriate to give annual prostate specific antigen tests (PSA) to all men over 40, or annual mammograms to women over 40? The total cost of such a program may exceed the total benefit, but the benefit to a small percentage of individual patients may be very great. Who should make these decisions?

Conclusion

As can be seen, the puzzle of the health care delivery system is complex and changing. Today’s delivery system looks much different than it did in 1990. Today there are more providers in New Mexico but physicians are complaining about the state of health care, some are leaving, and some are beginning to unionize. Today there are greater opportunities to use technology in delivering quality health care but some say that it is getting harder to get quality care. Today there are more programs than ever to provide people health coverage but there are more people than ever who are uninsured. In trying to sort through the contrasts and contradictions in the health care delivery system, it is important to remember that our current system is a hybrid – it is something that evolved, albeit imperfectly, over time. The delivery system adapts and grows to meet the challenges that face it. In grappling with ways to fix the current system, an equally dynamic solution is likely required.
The following is a fictional account of the differences between the health care delivery system nearly 30 years ago in the era of indemnity health insurance and today’s managed care environment. This account is offered to illustrate the differences in how an individual would access care as well as differences in costs.

One Man’s Health Care Experience: Then and Now

1970
Juan Mendoza, a 42 year-old carpenter from Las Cruces, was concerned about some stomach problems that he had been having. He was covered by Green Star/Green Armor of New Mexico through his employer, Doña Ana County. He had heard about a gastroenterologist in El Paso from a friend and called up the specialist’s office to schedule an appointment. Dr. Carter was able to see Juan the next week and he ordered a upper and lower GI series of x-rays as well as a sigmoidoscopy. Juan had the tests done immediately. Later in the week, Dr. Carter phoned Juan to let him know that there was evidence of colon cancer and he wanted to schedule him for surgery. The surgery was scheduled for the following Monday at El Paso General. During the exploratory procedure, Dr. Carter found that Juan did have a large tumor on his small intestine and had to perform a colostomy. Following the surgery, Dr. Carter referred Juan to an oncologist for radiation treatments to ensure that the cancer was eliminated. Juan was scheduled for a series of 20 radiation treatments in El Paso. Since Juan’s Green Star coverage was based on a fee-for-service arrangement with the providers, all of the charges were billed directly to the insurer by the provider. Six months after Juan’s surgery he received a bill from Green Star for $947 for a balance billing from El Paso General where the billed charges exceeded the maximum allowable charges. He then received a bill for $204 a year later for the oncologist’s services that exceeded the maximum as well. Insurance continued to cover all of Juan’s ostomy supplies and other medication.

1999
Juan Mendoza, now 71 years old, retired from the County in 1993. His colon cancer seemed to be in remission – 5 years after his last radiation treatment his children had a “survival party” to mark his attainment of the big 5-year survival mark. Juan is now covered by Applelove Health Plan – the County switched to Applelove a few years ago when the health plan expanded into Las Cruces from Albuquerque. The County risk manager said they decided to switch to Applelove because the rates were much better and that they liked the prevention-orientation of the HMO. Juan tries to see his doctor every year to make sure that he is clear of the colon cancer but he can no longer see Dr. Carter, the gastroenterologist in El Paso. Juan now has an annual visit to his primary care physician, Dr. Rangel, an internist employed by Applelove. During this year’s visit, Juan mentioned that he had been having some urinary problems. Dr. Rangel performed the usual digital rectal examination (DRE) and was concerned that Juan’s prostate
seemed unusually large. The doctor ordered a PSA test and Juan went to the Applelove lab that was located in the same building. Two weeks later, Juan got a call from a nurse from Applelove to let him know that he needed to come in to see the doctor again. The earliest available appointment was 3 weeks away. When Juan saw Dr. Rangel, she indicated that he needed to be evaluated by a urologist to confirm her concerns about his prostate and she gave him a referral form to take to his visit. Juan had to call Applelove member services to schedule an appointment with Dr. Piper, the urologist. Unfortunately Dr. Piper was out of town for a few weeks and he was the only Applelove Health Plan urologist available in Las Cruces, so the earliest that Juan could see him was in 6 weeks. These six weeks passed very slowly for Juan because he was very concerned that his colon cancer could have spread to his prostate. When Juan finally saw Dr. Piper, the visit was brief – he did another DRE, ordered a urinanalysis and checked the report on Juan’s PSA levels. Based on these tests, he told Juan that he was concerned that Juan might have some signs of advanced benign prostatic hyperplasia but felt that the best course of treatment was watchful waiting – he felt that surgery wasn’t indicated at this time. Juan told the doctor that he worried that his colon cancer could have spread to his prostate but Dr. Piper assured him that at this point it did not look cancerous. Juan was then scheduled to visit Dr. Rangel in 3 months so she could go over the test results in more detail. Because Juan was covered by an HMO, he had to pay $10 for each office visit. The remainder of the costs were covered through the capitated per member per month payment the HMO received from the combination of Juan’s premiums and the County’s contribution to his retirement health care plan.
Sources:


Institute of Medicine (1996) Special Issue on Primary Care. The Journal of Family Practice, 42(2).


Sources continued


Chapter 4:

HEALTH CARE FINANCING AND ECONOMICS

SUMMARY

• Health care financing comes from two sources: public payers and private payers.

• The public sector is a major player providing nearly half of the health care dollars in both the U.S. and more than half in New Mexico.

• At the national level, overall health expenditures topped $1 trillion in 1997 or nearly $4,000 per capita.

• Health care accounted for 13.5% of the nation’s gross domestic product in 1997.

• In 1996, New Mexico spent $4.6 billion or $2,672 per person on personal health care.

• Relative to per capita income, personal health expenditures were 14.3% in New Mexico as compared to 14% in the U.S.

• Expenditures have been increasing but at the lowest rates of increase in more than 3 decades.

• Managed care is playing a major role in health care financing, particularly in New Mexico.

• The public sector share of expenditures is growing both at a national level and at the state level.

• Projections for the future indicate substantial increases in health care costs.
Health care financing is a complex topic characterized by seemingly obscure details and constant change. According to a recent book by health policy analysts Bodenheimer and Grumbach, health care finance is a product of a series of social interventions. “Each intervention solved a problem but in turn created its own problems requiring further intervention.” (Bodenheimer & Grumbach, p. 7) Layered upon this evolutionary framework is the fact that health care represents a huge amount of money – both at the federal and state levels.

The analogy of a river works well as a device to understand health care financing. The one constant in this ever-changing milieu is that the “river” of health care dollars consists of two funding streams: private payers and public payers. Both of these streams are comprised of numerous tributaries that sometimes seem to have no clear bounds. Once the two major streams converge to form the river, the funds merge and churn and are then distributed to a wide array of health care providers and services. At this point, the water becomes muddy and it can be hard to track the source of the funds and what program(s) the funds flowed through before reaching their final destination.

The goal of this chapter is to help navigate these waters. This chapter will describe health care financing sources, methods and spending trends both in the United States and in New Mexico. The chapter will also address the question, “How much does health care cost us?”

**WHO PAYS FOR HEALTH CARE?**

Despite the complexity of health care finance, once you boil it down to the basics, the money comes from only two sources – public payers and private payers. **Public payers** include the federal, state, and local governments. **Private payers** broadly include employers, individuals, and other private funders. Insurance companies are often included in this category but they really serve as intermediaries between the payer and the provider. An important point to note here is that despite the fact there is this 2-part funding system, these two different sources spring from the same source – the individual. The individual’s role is evident in private funding, but individuals also fund public programs through taxes and other withholdings.

It is important to mention here that sometimes the distinction between “private” and “public” is difficult to make. There are times when public dollars are used to make private expenditures such as in the case for insurance premiums paid to private insurers for government employees or government contractors. This blurriness sometimes makes it difficult to precisely identify the source, but knowing that there are gray areas can be useful information.
Figure 1

Source: Levit, 1998

**Sources of U.S. Healthcare Expenditures 1997**

- **State/Local Gvt.** 13%
- **Federal-Medicaid** 9%
- **Federal-Other** 5%
- **Federal-Medicare** 20%
- **Out-of Pocket** 17%
- **Private Health Ins.** 31%
- **Other Private Funds** 5%

**PUBLIC SOURCES**

**National**

At the national level, overall health expenditures tallied $1.1 trillion in 1997 with nearly 90%, or $969 billion, of those funds going for personal health expenditures. Personal health care expenditures refer to what Americans spend on the following: hospital care, physician services, dental services, other professional services, home health care, drugs and other medical nondurables, vision products, durable medical equipment, and nursing home care. The remaining 10% includes program administration and net cost of private health insurance ($50 billion includes the difference between earned benefits and incurred expenses for private insurers, administrative expenses of government and philanthropic programs), government public health activities ($38.5 billion), research ($18 billion not including pharmaceutical company and manufacturer research) and construction ($16.9 billion).

**Medicare**

Forty-seven percent of national health expenditures comes from the government. The largest public health program is the federal Medicare program, which in 1997 accounted for $214.6 billion or 42% of the national publicly funded insurance pie. Medicare, established in 1966, is a federal program originally designed to provide health insurance to the elderly and now has been expanded to cover other groups. The following is a brief summary of Medicare developed by the Office of the Actuary in the Health care Financing Administration:
Title XVIII of the Social Security Act, entitled “Health Insurance for the Aged and Disabled,” is commonly known as “Medicare.” As part of the Social Security Amendments of 1965, the Medicare legislation established a health insurance program for aged persons to complement the retirement, survivors and disability insurance benefits under Title II of the Social Security Act.

When first implemented in 1966, Medicare covered only most persons age 65 and over. By the end of 1966, 3.7 million persons had received at least some health care services covered by Medicare. In 1973, other groups became eligible for Medicare benefits: persons who are entitled to Social Security or Railroad disability benefits for at least 24 months; persons with end-stage renal disease (ESRD) requiring dialysis or kidney transplant; and certain otherwise non-covered aged persons who elect to buy into Medicare.

Medicare consists of two primary parts: Hospital Insurance (HI), also known as “Part A,” and Supplementary Medical Insurance (SMI), also known as “Part B.” When Medicare began on July 1, 1966, there were 19.1 million persons enrolled in the program. A third part of Medicare, sometimes known as “Part C,” is the Medicare+Choice program – which was established by the Balanced Budget Act of 1997 (Public Law 105-33) and began to provide services on January 1, 1998. Beneficiaries must, however, have Medicare Part A and Part B in order to enroll in a Part C plan. In 1997, about 38 million persons were enrolled in one or both of parts A and B of the Medicare program. About 87 percent of all Medicare “enrollees” used some HI and/or SMI service in 1997. (Waid, 1998)

Medicare Part A covers hospital inpatient services, short-term care in skilled nursing facilities, hospice care and post-institutional home health care. Most people do not have to pay a premium for Part A because they or a spouse paid Medicare taxes while working. Part B covers outpatient hospital services, physician services, home health care, not covered by Part A, and other medical services such as ambulance transportation, durable medical equipment, physical and occupational therapy, mental health services, and diagnostic tests. Part B requires a premium, which is currently $45.50 per month. Neither of these plans covers prescription drugs but the Clinton administration has proposed that Medicare be expanded to cover pharmaceuticals.

Part C (Medicare+ Choice, also known as “Medicare Managed Care” plans) enables these benefits to be provided through a variety of managed care plans and other health plan choices. Many of these plans offer expanded benefits (such as prescription coverage) and may not charge an additional premium on top of what is paid for Part B, although recent reports indicate that this no-cost feature could change.
Medicaid

At $160 billion, Medicaid, which includes both federal and state monies, is the second largest piece of the health care budget comprising 32% of publicly funded insurance. The following is a brief summary of Medicaid developed by the Office of the Actuary in the Health Care Financing Administration:

Title XIX of the Social Security Act is a Federal-State matching entitlement program that pays for medical assistance for certain vulnerable and needy individuals and families with low incomes and resources. This program, known as Medicaid, became law in 1965 as a jointly funded cooperative venture between the Federal and State governments...to assist States in furnishing medical assistance to eligible needy persons. Medicaid is the largest source of funding for medical and health-related services for America's poorest people. In 1996, it provided health care assistance to more than 36 million persons, at a cost of $160 billion dollars.

Within broad national guidelines established by Federal statutes, regulations and policies, each State: (1) establishes its own eligibility standards; (2) determines the types, amount, duration, and scope of services; (3) sets the rate of payment for services; and (4) administers its own program. Medicaid policies for eligibility, services and payment are complex, and vary considerably even among similar-sized and/or adjacent States. Thus, a person who is eligible for Medicaid in one State might not be eligible in another State; and the services provided by one State may differ considerably in amount, duration, or scope from services provided in a similar or neighboring State. In addition, Medicaid eligibility and/or services within a State can change during the year.

(Waid, 1998)

Although Medicaid is known for the support that it provides to children and their mothers, it also provides medical care to the elderly, recipients of Supplemental Security Income (SSI), and the disabled. Children comprise 46% of all enrollees but costs associated with long-term care, specifically nursing home care, take one of the biggest bites from the Medicaid budget. A recent analysis by the Health Care Financing Administration (HCFA) stated that almost 45% of the total cost of care for all persons using nursing facilities or home health care is paid for by Medicaid. For extended care (four months or more), Medicaid covers a much larger percentage of the costs.

Together Medicaid and Medicare programs account for nearly 75% of publicly funded health care in the U.S. The other 25% of publicly funded health care consists of a variety of programs including the Veterans Administration medical programs, the Department of Defense’s CHAMPUS insurance program for active and retired military, Indian Health Service, and other state and local health care expenditures. Recently Medicaid, Medicare, and CHAMPUS have begun turning to managed care to control costs.
New Mexico

In New Mexico, determining the flow of health care dollars was made more precise in 1996 as the result of legislative action. House Joint Memorial 20 resulted in the creation of the “Funding Streams Workgroup” which tackled the task of tracking state level health care expenditures from their source to the state agencies which used them, and then to the function or service for which they were used. In 1998, UNM’s Bureau of Business and Economic Research (BBER), updated health expenditures as part of a larger activity to project health care expenditures and cost-out a health care reform proposal to establish a universal coverage health care system in the state.

![Figure 2](source: Reynis, 1998)

**Sources of N. M. Healthcare Expenditures**  
**Calendar Year 1996**

According to BBER, in Calendar Year 1996, New Mexico spent $4.6 billion on health care. The public sector was responsible for funding the largest overall portion of personal health care expenditures with 51% of the dollars. All levels of government contribute to funding personal health care expenditures in the state including local governments, which contributed nearly $60 million. County and city contributions come from local option gross receipts taxes for county indigent funds, mill levies or property taxes for supporting local hospitals, and other local option gross receipts taxes which support hospitals and/or other health care needs.
In 1996, $1.8 billion in federal health care dollars flowed into the state. In BBER’s analysis, these federal dollars fund the following:

- Medicare;
- Medicaid;
- Government-paid premiums for federal employees and retirees¹;
- Veterans Administration treatment facilities and hospitals;
- Military health care and Campus insurance for active and retired military;
- Indian Health Service; and
- Other federal programs.

State dollars totaled $464 million in 1996 and funded a variety of programs including the following:

- New Mexico’s share of Medicaid (nearly $250 million) and other federal programs;
- State-run hospitals and clinics;
- Subsidies for primary care and other non-profits;
- Grants to local governments for emergency medical services;
- Contractual payments to providers; and
- Immunizations and other direct public health services but not including environmental services such as food inspection or vector control as well as many other public health functions.

Local governments funded local hospitals, the sole community provider fund, the County-supported Medicaid fund, community-based health care programs, medical care for prisoners, and emergency medical services.

**PRIVATE SOURCES**

**National**

The other source of funds is private payers. At the national level, these private funds are categorized as being employer, employee and other consumer payments (both out-of-pocket and private health insurance premiums) as well as other private funds. It is important to note here that most people obtain private health insurance through employers – either through their own coverage at work or through a family member. In this national analysis, all em-

¹ Technical note: Upon discussion with Dr. Reynis, it appears that this category was included in error and should only be included in the “Private” sources. Dr. Reynis suspects that it may have been double-counted in her calculations by being included in both categories. However, if you back out the $97 million spent on federal employees in the state, the effect is minimal. Total public spending becomes 50.2% and private spending is 49.8%. In any event, the total impact of this error is very minor.
ployees are included in this category, including government employees. Individually pur-
chased insurance coverage is shrinking and was estimated to cover only 7% of the state’s 
population in 1997. Out-of-pocket spending covers the cost of coinsurance payments and 
deductibles as well as any other benefit that is not part of the insured’s package.

Of the $585.3 billion spent in the U.S. by private payers in 1997, 60% was on private 
health insurance premiums. A large portion of these premiums went to managed care or-
ganizations since, in 1997, 85% of the workforce with health insurance was in some type of 
managed care. Managed care includes Health Maintenance Organizations (HMO), Preferred 
Provider Organizations (PPO), and Point of Service (POS) plans. (See Chapter 3 for a more 
detailed explanation of managed care.) The New Mexico Department of Insurance defines a 
“managed health care plan” as follows:

A health care insurer or a provider service network when offering a benefit that 
either requires a covered person to use, or creates incentives, including financial 
incentives, for a covered person to use health care providers managed, owned, 
under contract with or employed by the health care insurer or provider service 
network. “Managed health care plan” or “plan” does not include a health care in-
urer or provider service network offering traditional fee-for-service indemnity 
benefit or a benefit that covers only short-term travel, accident-only, limited bene-
fit, student health plan or specified disease policies

Out-of-pocket payments totaled $188 billion and other private funds contributed just over 
8% of the total private funding sources.

New Mexico

In New Mexico, 49% or $2.3 billion of health care expenditures were covered by private 
funds. However, a substantial portion of these private funds are actually on behalf of public 
employees who are covered for health insurance with private carriers. This group includes 
employees from the following: universities, public schools, public sector employers (such as 
city, county, state and federal workers), and the national labs. Retirees from these employers 
would also be included. Additionally, neither the federal nor state public expenditures in-
clude premiums paid for private contractors that do business with the government since these 
are actually paid by a private enterprise. Thus, with the omission of these payments, some 
state that publicly funded health care expenditures are understated. A countervailing ap-
proach to this issue would be to draw a distinction between the roles of government. When 
government is serving as an employer (providing benefits just like a private sector employer), 
the funds should be considered private. When government is serving as a provider of ser-
vices or benefits (providing services at an IHS clinic, albeit through a contractor), these funds 
should be classed as public. This is the approach that the expenditure analysts have used.
BBER categorized private sources in a slightly different way than is done at the national level, but comparisons can still be made. The four types of private payers are as follows:

1. Health maintenance organizations (HMOs);
2. all other types of insurance which includes traditional insurance plans such as Blue Cross Blue Shield and all other insurers (non-profits, for-profits, accident, health, property and casualty, self-insured, public sector employees coverage, Public School Insurance Authority, some municipalities and counties, and the Retiree Health Care Authority);
3. out-of-pocket; and
4. other funding sources including charity care, industrial in-plant health care, philanthropic funds and non-patient revenues that come from non-tax sources such as gift shops.

The largest proportion of private funding came from the “other insurance” category which amounted to 44% of all private sources. Next was out-of-pocket costs tallying 33% of private sources. HMOs accounted for 21% of all private funds -- by breaking out HMOs separately from other insurance, this growing source of coverage for many New Mexicans can be tracked more carefully.

“Other sources,” which tallied nearly 2%, includes charity care provided by hospitals, private physicians and other providers. According to a recent report commissioned by the New Mexico Hospital and Health Systems Association, the state’s hospitals provided nearly $200 million in uncompensated care in 1997. This figure includes charity care, unreimbursed costs for government indigent care programs such as Medicaid and Medicare, and provision for bad debt. The Health Policy Commission (HPC) has estimated that hospitals provide approximately $68 million in charity care based on hospitals responding to a survey they conducted in 1998. The difference in these two amounts is based on how unreimbursed care and bad debt is treated. HPC promulgated regulations in 1999 to define charity care to be “the provision of medically necessary care to an individual who: 1) has a household income of less than 200% of the federal poverty level; and 2) is without any reasonably identifiable alternative third-party or other payment sources, such as Medicaid, Healthier Kids Fund, or county indigent fund; and 3) who has been deemed, pursuant to the facility’s credit and collection policies and procedures, financially unable to pay for all or part of the services rendered.”
WHERE DOES THE MONEY GO?

Figures 3 and 4 compare the most recent data on percentage expenditures between the U.S. and New Mexico. Note that the U.S. expenditures are for calendar year 1997 and for New Mexico they are calendar year 1996. There are also slight differences in the categories that are used for capturing health expenditures between the two groups. These differences in categorization would likely have only a minimal impact on the category totals and should not make a difference in a general understanding of where the money goes.

National

According to the annual study by the Health Care Financing Administration (HCFA), the United States continues to spend more on health care than any other industrialized country. In 1997, the nation poured $1,092 billion into health, which represents $3,925 per U.S. citizen. This marked the second year in a row that spending had topped $1 trillion. Despite the staggering figure, this amount represented the lowest increase in expenditures since 1961 with a 4.8% increase over the previous year.

Another measure of health care spending is as a percentage of the total gross domestic product (% GDP). In 1960, health spending as a % GDP was only 5.6%. In 1997, health spending as % GDP was 13.5%. In other words, today almost one-seventh of the goods and services produced in the United States goes to health care. Although this percentage has been fairly stable since 1993, it still dwarfs the health care expenditures of other countries.
New Mexico

Personal health expenditures for New Mexicans (public and private) were approximately $4.6 billion in 1996 for health care, or $2,672 per person. According to an analysis of personal health care expenditures in New Mexico done by the Bureau of Business and Economic Research (BBER), these expenditures represented about 10.8% of the gross state product (GSP), which is a state-based measure of the GDP. If premiums were used as the basis, the GSP would be 11.2%, which is the same as the national GDP for personal health care in 1996. BBER goes on to state that “on a per capita basis, estimated New Mexico personal health care expenditures were roughly $2,700 in 1996 versus the U.S. average of over $3,400. Relative to per capita income, personal health care expenditures in New Mexico were 14.3% -- just slightly higher than the national average of 14.0%.” (BBER, p. 2)

The biggest difference between the national expenditures and New Mexico is in the area of hospital costs. According to BBER, these figures are most likely to be overstated because they probably include payments made to physicians and other providers. This miscategorization is due to some accounting systems in the state, both public and private, that credit provider services to hospitals. This is especially likely to happen in military treatment facilities and Indian Health Service hospitals as well as in large integrated service providers that offer a full range of health care services and may consolidate their information for reporting purposes. (BBER, 1998)
Concerns Voiced About Health Care Financing

The United States spent $1.1 trillion for health care in 1997. Because they pay more per capita and as a percentage of gross domestic product than any other industrialized country, many Americans wonder if they are getting their money’s worth. The U.S. lacks a national policy ensuring basic health care services for all its citizens. Despite our huge investment of resources in health care, our health outcomes seem to be a mixed bag in comparison to other countries. We have made improvements in the areas of cardiovascular disease mortality, infant mortality and life expectancy but we still lag behind most developed countries in those outcomes. And given what the Nation is spending in health care, we do not always apply what we know. For example, people with illnesses such as diabetes, high blood pressure and high cholesterol are controlled in only 30% of those diagnosed – despite good treatments available.

Despite the enormous resources spent on health care in the U.S., currently 43 million Americans are uninsured. This is a particular concern in New Mexico, where in 1997, insurance levels were 22.6% for the state’s total residents (413,000 people) and 28% for the state’s adults between 19 and 64. It has been documented that the uninsured have poorer health outcomes than do insured persons. Since the uninsured rely on emergency services for their care, disease is typically diagnosed at a more advanced stage than if a person has coverage and is receiving regular care. Research has found the uninsured have more preventable hospitalizations, higher risk of death when admitted to a hospital, lower immunization rates, and fewer visits for preventive services.

Most of the uninsured are the working poor and come from families where at least one member works. Nearly half of all adult New Mexicans in families with incomes below 200% of the Federal Poverty Level (FPL), which is $33,400 for a family of 4, were uninsured. This compares to 13.7% for those in families with incomes above 200% of the FPL. In New Mexico, of all non-elderly uninsured adults, 85.5% were in households with an employed adult. Fourteen percent of the uninsured were in families where both adults worked full-time. (HPC, 1999)

Insurance coverage in the United States is largely employment-based and most people get their insurance through either their own employment or through a family member. But as the numbers of uninsured employees in New Mexico attest, being employed does not guarantee health insurance. This is the function of two basic elements – supply and demand. Many small employers simply cannot afford to provide insurance to their employees. New Mexico’s employment base is largely comprised of small employers – nearly 88% of the state’s businesses employ less than 20 people. These businesses are less likely to be able to afford insurance coverage than are larger companies. As noted in Chapter 3, according to a study conducted for the Health Policy Commission, 68% of those adults employed in 1998 were offered health insurance through their employment.

The other side of the insurance coin is demand. Recent research has shown that many employers say that they don’t offer insurance because their employees aren’t interested and that it isn’t a necessary benefit to attract employees. (Cooper, 1997) This research also
found that fewer people who are actually offered insurance are taking it. While most people who are offered insurance will accept it, an increasing number of employees are declining this benefit. Insurance “take-up” rates fell from 88.3% in 1987 to 80.1% in 1996. This decline in coverage may be attributed to several factors including “declining real incomes, increasing costs of insurance, rising employee contributions to health insurance premiums, and expansions in Medicaid.” (Cooper, p. 147) In New Mexico, 80% of those employees offered insurance enrolled. Cost is cited by New Mexicans as the leading reason for not obtaining coverage.

Another concern about the state’s financing arises around providing a “safety net” for the uninsured and other vulnerable populations. With New Mexico’s high uninsured rate, high percentages of minority populations, and its sparsely populated rural areas that make health care access difficult, care for these populations falls disproportionately on “safety net” providers. This safety net includes public hospitals, teaching hospitals, community health centers, public health centers, and generalists in rural and urban, poor neighborhoods. In the past, margins from fee-for-service reimbursement were used to subsidize the costs of indigent care. Several recent actions have minimized the ability to “cost shift.” Both private and public payer movement to managed care has trimmed such margins and the 1997 Balanced Budget Act has reduced federal subsidies to facilities serving a disproportionate share of uninsured, Medicaid and Medicare patients. Often public “safety net” providers continue to serve the highest complexity patients, and lose the more profitable populations to private enterprise.

Other concerns and questions raised about financing include the following:

- Resources are finite – does the Nation or the state want to continue pouring millions of dollars into health care when other issues are so pressing? Despite the fact that the rate of increases in health care costs has declined slightly over the past five years, they are beginning to increase again.
- Competition and its impact on the health care financing system.
- Reductions in Medicare reimbursements as a result of the Balanced Budget Act of 1997 are hurting providers of all types, not just the “safety net” providers.
- The ability to “cost-shift” from private payers to provide care for the uninsured is decreasing and impacts the availability of care for the indigent. However, some people question whether cost-shifting should be allowed at all.
- Impact of other proposed changes to Medicare and Medicaid on the state and its providers.
- Lack of funding for preventive services, particularly primary prevention at the early childhood level.
- Should the health care industry contribute more in taxes as a way to fund health care? Should hospitals or other providers that are currently tax-exempt be required to pay taxes on revenues?
• Should there be changes in tax policies regarding the deductibility of health insurance premiums for employers? Should these benefits be extended to individual purchasers of insurance?

• Should gross receipts taxes continue to be levied on health care services? If so, should those funds be used for health care?

• Should employment continue to be the basis of health care insurance?

Financing Trends

As has been noted in the earlier sections of this chapter, the rate of health care cost increases at a national level has been declining over the past couple of years after reaching a high of 12.2% in 1990 to the current rate of 4.8% for 1997. HCFA has attributed this low rate of growth to the convergence of three factors: 1) increasing enrollment of employer-sponsored insurance programs into managed care; 2) low inflation in general and in the medical-specific economy; and 3) increased competition that drove down the cost of insurance in managed care plans. (Levit, p. 99) The latest HCFA projections show the 1999 rate of increase to be 6%.

According to Reynis’ work, in New Mexico, personal health care expenditures grew from $3.9 billion in 1993 to $4.6 billion in 1996, an increase of 18.6%. This represents a compound annual growth of 5.8% compared to the national rate of 4.8%, before adjustment for inflation. One factor in the increase is the growth in the state’s population which increased by an annual compound rate of 1.9% compared to the U.S. population growth of 0.9%. (BBER, 1998)

Two of the above-noted factors that have slowed the growth of health care costs deal with the increase of managed care, which is nothing new to New Mexico. As can be seen in Figure 5, managed care penetration is quite high in the Albuquerque area. In fact, Albuquerque has the highest penetration of HMO coverage of any city in the U.S. at 64%, and has another 20% in PPO’s. The rest of the state is less highly penetrated and is about average compared to other states, although with the advent of the Salud! Medicaid managed care program, this number is likely to increase.
Health care premiums, in decline for several years, have begun to rise again as is shown in Figure 6. Some attribute this increase to insurance companies increasing their rates after keeping them artificially low to attract more members and, due to the losses they have sustained, now they must raise premiums. The potential for double-digit increases is quite real for 2000, although insurers have not filed their rates with the Department of Insurance at this writing. (Sedrel, 1999)

Figure 6: Commercial Insurance Premiums in New Mexico

Source: D. Derksen, Executive Summary, Office of Health Services, UNM Health Sciences Center, FY 1998 and 1999
Another trend that has the potential for having a serious impact on the state’s health care finances is that of the financial strength of HMOs. Recent reports of weak financial ratings of some of the health plans, as well as some HMOs, posting losses have some industry watchers concerned. One financial rating firm downgraded the ranking of two New Mexico health plans in 1999 but the potential impact of these rankings is mixed. Some analysts say that the federal and state regulators will ensure that their obligations to members will still be covered and that many of these ratings are overly pessimistic. (O’Dowd, 1999)

The shift from private to public funding of health care over the last 20 years has been another important change. According to the HCFA health expenditures analysis, this is a trend that was begun in 1990. “The share of health spending financed from public and private sources inched closer together in 1997…Private funding paid for 53.6 percent of health care ($585.3 billion), down from 59.5 percent in 1990; public programs funded 46.4 percent ($507.1 billion), up from 40.5 percent in 1990. Although the growth in public spending still exceeded private spending growth in 1997, growth differences between these two payer sectors narrowed to one percentage point, down from a differential of 7.4 percentage points in 1994.” (Levit, p. 99)

What does the future hold?

Recently an article that projected the next 10 years of health care spending, painted a different picture of health care financing trends than what we have been seeing for the past 5 years. (Smith, 1998) These projections offer little hope that the country’s health care financing concerns have passed. Here is what a team of national health care economists and actuaries predict the future will hold:

- Health care as a percent of gross domestic product will rise from the current level of 13.5% in 1997 to 16.6% by 2007.
- Spending will double and will top $2.1 trillion compared to the current total of $1.1 trillion by 2007.
- Demand for health care will increase fueled by higher per capita income.
- Managed care enrollments will slow.
- Greater expenditures will come from the private sector compared with recent history of public sector growth as a result of both slowdowns in Medicare and Medicaid growth as well as increases in per capita income.
• Drug costs and spending will continue to grow both in utilization (number of prescriptions written) and in intensity (size and mix of prescriptions) and are projected to top $170 million in 2007. Despite the fast growth of this category, it will be surpassed by the growth of the “Other personal health care” category after 1999. This category includes industrial in-plant services and a “slush fund” for government expenditures for care not specified by kind.

• Increases in spending for both nursing home care and home health care will continue but at slower rates than were seen in the previous decade as a result of some changes in Medicare and Medicaid.

Several factors and assumptions are woven into the authors’ projections including:

• Aging of the population will continue but, as a percentage of the population, the growth will be at a slower pace than the past 30 years. “[T]he coming decade represents the calm before the storm, to be followed by a period of acceleration in aging baby boomers’ demand for health services.” (p. 131)

• Managed care has provided some reductions in the cost of health care especially in the private sector but it is not expected to reduce Medicare spending growth because MCOs are still competing with fee-for-service providers for most of the Medicare beneficiaries. To attract enrollees, MCOs need to expand their benefits packages thus lessening potential cost savings.

• Reductions in spending that come as a result of managed care will not be as great in the next decade.

• The uninsured population will continue to grow as the costs of employment-based insurance increase both for the employer and for the employee.
Is Health Care Like a Pasture?

The tension between individual choice and population health is a prominent feature of the financing of health care. A prominent biologist, Garrett Hardin, wrote "The Tragedy of the Commons" in reference to the use of a shared, finite resource. The Health Commons is a useful metaphor for health care as a finite resource. In his piece, Hardin described a community pasture whereby each herdsman seeks to maximize his individual gain. The tragedy occurs when each is locked into behaviors that increase his herd without limit. The pasture’s carrying capacity is exceeded bringing ruin to all. Payers, both public and private, shift risk to providers and hospitals – but the demand by individual stakeholders continues as if more is better, nor a limit to the resource. Costly or uninsured populations are forced into public safety net systems that are well past their carrying capacity, and experience serious deficits. Even in good economic conditions, the pressures on our public systems have expanded and the ranks of the uninsured have grown. If we do not consider the community impact of our personal (and corporate) actions, the Tragedy of the Commons will play itself out in health care by bringing ruin to all, unless changes are made.

Source: Dan Derksen, UNM Health Sciences Center
Sources:


New Mexico Health Policy Commission (1999) Household survey results (Unpublished data)


O'Dowd, G.G. (1999, September 20)  HMO scores don't alarm the analysts:  State’s three leading plans get low grades.  Albuquerque Journal (pp. 1, 9 in Business Outlook)


Chapter 5: SPECIAL ISSUES

SUMMARY

Aging of the Population
• New Mexico’s population is aging faster than the national average and will require additional services in the future. There are great needs for home care, long term care, support for caregivers, and community-based services.
• The Balanced Budget Act of 1997 has had a serious impact on the home health and nursing home providers. Reductions in payments have led to the exit of at least 70 home health agencies, particularly in rural areas.

Behavioral Health/Mental Health
• Mental health problems are widespread – some type of mental illness will afflict 1 in 5 Americans during their lifetimes. Depression is the most common form and can contribute to negative health outcomes. Substance abuse and mental health problems are clearly linked and both problems often begin early in life.
• Obtaining mental health services is difficult particularly for those in rural areas as well as for other populations such as the developmentally disabled, the disabled, elderly, American Indian communities and many Medicaid recipients.

Border Health Issues
• The border area is a fast-growing and very poor area of the state that has a unique set of health challenges. Some of the key health issues include lack of access to health care, infectious diseases, diabetes mellitus, environmental hazards, behavioral and mental health, and teen pregnancy.
• Efforts to address these problems are underway through the newly formed U.S.-Mexico Border Health Commission as well as other local, state and federal initiatives. Additional coordination of services is a critical step.

Complementary and Alternative Medicine
• It is estimated that over 42% of U.S. adult population used some form of complementary or alternative medicine (CAM) in the past year and spent more that $21 billion on these therapies.
• In New Mexico, the most common CAM modalities are herbal medicine, homeopathy, vitamin and nutraceuticals, chiropractic, Native American medicine, massage therapy, acupuncture, and cuaranismo.

Environmental Health
• Three key issues have been identified as the most important environmental health concerns in New Mexico: drinking water contamination related to growing industry and population, air quality in the middle and lower Rio Grande Valley, and contamination and improper labeling of food.
Improvements are needed in state and local surveillance systems and the way in which monitoring data are analyzed.

**Health Promotion/Health Education/Disease Prevention**

- Efforts in this arena can pay off in improved health outcomes in the future. Programs that focus on children are especially effective to help establish healthy lifestyles that will be carried with them throughout their lives.
- There are a wide variety of programs underway in the state to improve the health outcomes of all New Mexicans no matter their age or income.

**Indian Health Care**

- The concept of tribes and Indian people having the right to determine their own future is as critical to health care as it is to any other aspect of Indian life. Self-determination also is a factor in the Federal trust responsibility to provide health care to Native Americans.
- Numerous changes and challenges face tribes especially the trend for the Federal government to transfer authority to the states such as in the Medicaid and welfare programs, New Mexico’s Medicaid managed care system, and tribes taking on their own health care as a result of P.L. 93-638.

**Oral Health**

- Oral health plays a significant but overlooked role in overall health. Recent research provides solid evidence linking poor physical health with poor oral health.
- Lack of availability of dental services is an ongoing problem in New Mexico and one of the major reasons that there is a shortage of providers, especially in rural areas and for several populations.

**Persons with Disabilities and the Developmentally Disabled**

- Persons with disabilities are a growing segment of the population, representing 16-18% of the U.S. Key areas of concern for the disabled include depression, mental health services, employment, environmental barriers, transportation, public health surveillance and health promotion, and housing.
- Developmental disability, a condition that impairs learning, communication, physical movement, and ability to care for one’s self, affects approximately 20,000 individuals in the state. Although funding has increased for this population, some additional needs include mental health services, dental care, services for the aging population, specialist access, prevention of abuse, greater focus on culturally sensitive and ethically based decisions.

**Public Health System**

- There are three key functions of public health: assurance, assessment, and policy development.
- In New Mexico, the Public Health Division of the Department of Health has been redefining its role to shift from a primarily clinically focused organization that provides direct services to clients to one that helps activate communities to address the determinants of their own health problems.

**Rural Health**

- Rural areas tend to have higher levels of poverty, more elderly, greater number of uninsured, higher levels of unemployment, and lower paying jobs. These characteristics translate into numerous barriers to health care access.
• Poverty and the lack of community financial resources play out in numerous ways including the inability to maintain hospitals and the ability to recruit and retain providers. Experts suggest that better networks of providers along with improved communication, coordination and transportation are key to solving problems.

Training of Health Care Providers and the Role of Academic Health Centers
• Preparing health care providers is a task shared among more than 2 dozen colleges, universities, community colleges and proprietary schools. The programs these schools offer are expanding and are restructuring to provide students with the skills to work in today’s health care environment and to meet the needs of the state, especially rural areas.
• The University of New Mexico Health Sciences Center is the state’s only academic health center (AHC) and offers the opportunity to provide research and educational experience to patient care and communities. Since AHC have broad missions, they are more costly to operate than other health care facilities. Declining funding from federal programs and third party payers is creating financial challenges for institutions like UNM.

Other Concerns/Influences
• The complexity of the health care system has become a barrier for many – especially the elderly and those who do not speak English as his/her primary language.
• The exploding amount of health information available to consumers can leave the less informed vulnerable to bad information. An informed consumer is the best defense.
• Direct marketing of products by pharmaceutical companies to consumers drives up potentially unnecessary demand and cost.
• The ability of the health care system to keep health information private and confidential is a growing concern.
• Despite the efforts of many people providing programs in both the public and private sector, there is a large number of people who are not aware of many health programs and services that are available.
• Culture and language continue to be barriers to care and they need to be addressed if health care is to be delivered effectively.
Beyond the basic issues of health care delivery systems and financing systems, there are a number of important issues that must be considered when evaluating New Mexico’s health care system. The things that make the state so unique and diverse are also issues that must be addressed in making our health care system work more effectively for all of us. Some of these issues are integral to solving the problem while other issues offer particular challenges that must be reckoned with in order for an effective solution to be achieved. The following section is a series of mini-chapters on a variety of issues. Each one of these topics could easily be the subject of its own Town Hall, but the purpose of this chapter is to raise these issues in brief so that participants will be familiar with the range of challenges and strengths that are presented in the state’s health care arena. These topics are presented alphabetically and there is no attempt to rank their importance.

The following twelve issues will be discussed in this chapter: the aging of the population, behavioral health/mental health, border health issues, complementary and alternative medicine, the developmentally disabled and the disabled, environmental health, health education/health promotion/disease prevention, Indian health care and tribal self-determination in health care, oral health, the public health system, rural issues, and training of health care providers and academic health centers.

### Aging of the Population

We are becoming a society of older people. New Mexico has traditionally been a younger state in terms of the overall average age of its residents but the aging wave of the Baby Boom will change this. Census data show that the population’s median age has increased nearly 3 years between 1990 and 1997. According to a report issued by the Albuquerque Department of Senior Affairs, New Mexico is aging at a faster than average rate. New Mexico’s 65+ age group has increased over 18% since 1990 compared with a national increase of only 9%. The 85+ group is the fastest growing segment in the nation, increasing 40% since 1980. The income of this group is higher than that of their parents; however, 1 in 6 New Mexico seniors lives in or near poverty. Those who are poor have fewer options for care, and may be more likely to live in nursing homes.

The health care needs of this population are understandably different from that of a younger group. Forty percent of all hospital stays are for seniors, and health care spending in the state is 3.5 times higher for those age 65+ than for younger New Mexicans. Over 1/3 of seniors have severe disabilities which require different care needs.

A critical concern for seniors who need additional assistance with their normal activities of daily living is for in-home health care. Many older people have disabilities that make it difficult for them to fully care for themselves. For those elderly living at home, 66% of those who need assistance depend solely on family and friends for caregiving. If they have money to pay for services to allow them to stay in their homes, they can get help. However, for the low-income elderly, resources are scarce. There is usually a two-year waiting list for homemaker services. Nursing homes are sometimes an “affordable” option if a person is covered under Medicaid or Medicare but the costs are extremely high. If a person were to go to a
nursing home, it would cost the government about $36,000-40,000 per year. For those covered under the Medicaid Disabled and Elderly waiver, they can receive in-home care for approximately $14,000-16,000 per year.

With the aging of the population, the issue of caregiving has become quite large. Providing care for aging family members is a strong tradition in both Hispanic and Native American cultures in the state. Since so many elders living at home are cared for by family and friends, there is an impact on the caregivers as well. Caregivers are typically daughters who are employed outside the home and are also caring for their own children. Women often spend more years in caregiving of parents than they do of children. With more women in the workforce, there are more employees providing care. One in four employees is currently in a caregiving role. These employees frequently have high stress levels and need some means of stress relief. When the caregiver is a spouse, there is usually a negative impact on the caregiver’s health. Increased longevity, retirement at older ages, and smaller families are expected to exacerbate this problem for aging baby boomers. (Also see discussion of caregivers in Chapter 3)

A recent development that has affected the entire health care industry but particularly home health care and nursing homes is the Balanced Budget Act (BBA) of 1997. This legislation was intended to bolster the Social Security Trust Fund by reducing social security reimbursements to providers. These reductions were done with the goal of “stemming the growth” of home health and nursing homes. The impact has been as-

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**The Ship Pounding**

Each morning I made my way among gangways, elevators, and nurses’ pods to Jane’s room to interrogate grave helpers who had tended her all night like the ship’s massive engines kept its propellers turning. week after week, I sat by her bed with black coffee and the Globe. the passengers on this voyage wore masks or cannulae or dangled devices that dripped chemicals into their wrists, but I believed that the ship traveled to a harbor of breakfast, work, and love. I wrote: “When the infusions are infused entirely, bone marrow restored and lymphoblasts remitted, I will take my wife, as bald as Michael Jordan, home to our dog and day.” Months later these words turn up among papers on my desk at home, as I listen to hear Jane call for help, or speak in delirium, waiting to make the agitated drive to Emergency again, for re-admission to the huge vessel that heaves water month after month, without leaving port, without moving a knot, without arrival or destination, its great engines pounding.

By Donald Hall

In “Rough Crossings: Family Caregivers’ Odysseys through the Health Care System”
touncing – the Congressional Budget Office estimates that $48 billion will be trimmed in home health reimbursements and even more will come from nursing homes. In New Mexico, 70 home health providers are no longer providing care (bankruptcy, left state, etc.) since implementation of the BBA leaving many parts of the state with a critical shortage of providers. When Congress reconvenes in the Fall of 1999, this issue is to be near the top of the agenda.

In the area of long term care (LTC), New Mexico has taken a leadership role. The changes that are currently being made to the system are the result of over 20 years of efforts. Recognizing that institutional care has been the primary means of providing LTC, advocacy groups have been working diligently to expand options. The HOME Coalition (Home Options Mission for Everyone), founded in 1997, successfully lobbied the state legislature to address the issue of funding and service delivery and won passage of the Long Term Care Services Act in 1998.

Now that the Long Term Care Services Act is law, the state must design a master plan for an integrated system that encompasses the principles of the Act. In their most recent report to the Governor, the Long Term Care Interagency Committee recommended the following:

- expansion of home- and community-based services,
- development of the first phase of a rural PACE (Progressive All-inclusive Care for the Elderly) model which is a holistic, preventive health care program for seniors which focuses on keeping them healthy and out of hospitals and nursing homes,
- integrated case management services, and
- centralized statewide system of intake and screening.

The state must face the challenge of integrating funding streams to better serve vulnerable populations regardless of age or disability. There are an array of potential solutions but it will require the combined leadership of consumers, advocates, the business community as well as government to join together to form more public/private partnerships, rather than to continue to rely on public funding to meet these demands.

**Behavioral Health/Mental Health**

Behavioral health and mental health are similar terms but there are many different ways to conceptualize them. Some define optimal mental health as a state of well being in which the individual functions well in society and is generally satisfied with life. Behavioral health is understood by many to include substance use or abuse. Optimal behavioral health results in socially acceptable behavior and the ability to respond productively and appropriately in the environment.

Mental illness is a disturbance in an individual’s thinking, emotions, behaviors, and physiology. Clinicians increasingly recognize that there is substantial overlap between physical and psychiatric conditions and that each one affects the other in complex ways, leading to problems with behavior, relationships with people, and the ability to function.
Mental illness includes a number of different specific disorders. Some are relatively minor and others can cause severe suffering and disability, and may even lead to death. One of the most common of these disorders is depression, which can produce physical as well as emotional symptoms and, if left untreated, can lead to suicide. Some disorders, such as schizophrenia, involve delusional thinking or hallucinations. Other severe, disabling disorders include post-traumatic stress disorder, which is sometimes seen in combat veterans and the survivors of violence, child abuse/neglect, or natural disasters. (DOH, 1999)

The National Institute for Mental Health has noted that the stakes of dealing with mental health are quite high. Studies have shown that major depression is the leading cause of disability in developed countries like the U.S. Depression has been found to have as much or more impact on patients’ functioning as hypertension, arthritis, back problems and lung problems. It also increases the risk of death from various illnesses. Bi-polar illness, schizophrenia, and obsessive-compulsive disorder are also near the top of the list of causes of disability. Mental health disorders are also contributors to mortality with suicide perennially representing one of the leading preventable causes of death.

Mental illness impacts New Mexicans in many ways. For a person who has a mental health disorder, it can mean deteriorating physical health, damaged relationships, inability to work, and a great deal of suffering. In extreme cases it can lead to total disability, homelessness, or, as mentioned, suicide. Effects on the person’s family can include difficulty in parenting, child abuse or neglect, or destruction of the family. In children, mental health disorders can lead to poor school performance and other problem behaviors. All of these can produce children and adults who have difficulty living fulfilling or productive lives, attaining self-sufficiency or supporting their family. (DOH, 1999) Another factor is the issue of comorbidity – a person may try to self-medicate with drugs creating a situation that results in two illnesses instead of just one.

These issues have frequently been hidden from the public eye because of the stigma that is often associated with mental health. Despite the fact that mental health problems tend to be hidden or locked out of sight, they are very common. According to a recent article in The Albuquerque Tribune, some type of mental illness will afflict one in five Americans during their lifetimes. Schizophrenia alone is 50 times more common than cystic fibrosis, and 60 times more common than muscular dystrophy.

It is estimated that nearly 80,000 New Mexicans suffer from “serious mental illness” as defined by the federal Substance Abuse and Mental Health Services Administration (SAMHSA). The definition includes: schizophrenia, schizoaffective disorder, manic depressive (bi-polar) disorder, autism, severe forms of major depression, panic disorder, obsessive-compulsive disorder, or any specific mental disorder that substantially interferes with a person’s ability to work. Over 44,000 New Mexican children and adolescents under 18 suffer from “serious emotional disturbance” as defined by SAMHSA. This definition includes any diagnosable mental disorder that seriously interferes with a child’s role or functioning in family, school or community activities. (DOH, 1999)
A key issue within mental/behavioral health is treating substance abuse, which includes alcohol, tobacco and other drugs. Like many other mental illnesses, substance abuse begins early in life. Given the huge cost of substance abuse to our society in terms of productive years of life lost, treatment and prevention of these problems should be a priority. Research shows the linkage between substance abuse and mental health problems and the recent New Mexico School Survey shows a clear relationship for young people. As frequency of drug use increases, the average level of depression increases and self-esteem decreases. Those with mental health problems may sometimes mistakenly attempt to cope with them by using alcohol or other drugs which can continue the cycle of depression and more use.

There are still many populations that are hard to reach with mental health services. In rural areas, increases in access to behavioral health and mental health services have been offset by a decline in resources for children and adolescents due to funding restrictions. Other populations, such as the developmentally disabled, the disabled, the elderly, and members of American Indian communities, still find it difficult to get mental health services. In addition, there is a need for adequate community-based alternatives to institutional care and for vocational and other support services.

Another issue for many in the state is how behavioral health was handled in the Medicaid managed care program, Salud! Behavioral health services were included in the overall benefits package in Salud! and were then subcontracted out by the managed care organizations. Some advocates believe that the primary care provider model doesn’t mesh with behavioral health in a managed care setting. They believe that the crisis-based nature of behavioral health doesn’t lend itself to a planned, manageable model. Additionally the patient has to deal with two systems – the managed care organization and the behavioral health organization. This can create difficulties for patients with mental illness who may have trouble navigating the system. According to one physician, “Patients with mental illness have a difficult time advocating for themselves and thus they are a vulnerable population and have difficulty with this managed care system.” A final issue is the general coverage of mental health benefits. Parity of mental health benefits – or having the same type of coverage for mental health issues as are provided for any other type of illness – has been an issue of debate for many years. Senator Pete Domenici has been a champion of these efforts at the federal level. Congress passed legislation that requires employers to provide mental health coverage without caps that are less than general health services, and after some loopholes were discovered in this bill, additional legislation has been proposed. Opponents of this type of legislation say such mandated coverage drives up the cost of health insurance thus increasing the rolls of

“Alcohol and substance abuse are the number 1 clear problem in the state. They contribute to so many problems – particularly alcohol-related violent deaths like motor vehicle deaths, homicides, suicides, robbery.”

— INTERVIEWEE
the uninsured when employers stop providing insurance as a employee benefit. Supporters of parity say that research does not support claims of higher premiums and state that the increased costs of mental health parity are minor. Similar legislation was passed in both the 1999 Regular and Special Sessions of the New Mexico State Legislature but was vetoed by the Governor.

Reaching children where they are: The New Mexico School Mental Health Initiative

Since mental health problems often strike early in life, there are some programs that have been developed in New Mexico to address these issues. One of these programs is the School Mental Health Initiative (SMHI) within the New Mexico Department of Health (DOH). The mission of the SMHI is to collaborate with students, parents, schools and communities to enhance student success by building awareness and promoting strategies to improve student mental health. The SMHI helps schools develop programs through community support, technical assistance, and training. School mental health programs can improve school attendance, academic performance and resiliency, while reducing dropout rates, school violence, and suspensions/expulsions. The SMHI works with school-based health centers (SBHC) across the state and collaborates at the state level to fund school behavioral health pilot sites, a statewide behavioral health “Train the Trainer” model, and other children's behavioral health projects. The program has also set up a primary care pilot site to train local primary care providers on how to identify and treat children's mental health issues in an isolated, rural area of the state. Early results are favorable and point to the need for additional resources to reach more children and adolescents.

Border Health Issues

In the legislation that created the U.S.-Mexico Border Health Commission in 1994, the border area was defined as “the area located in the United States and Mexico within 100 kilometers of the border between the U.S. and Mexico.” This 2000-mile border area includes the four states on the United States side and six states in northern Mexico, which are contiguous to the international border between the two nations. In New Mexico, this area includes the counties of Hidalgo, Luna and Doña Ana. The last two counties are experiencing growth at a rate almost twice the state’s average, with the fastest growing of the three being Doña Ana which is projected to increase by over 38% between 1996 and 2010, yet all three have poverty rates at double the national average.

The race/ethnic distribution by county from the 1990 Census is as follows:

<table>
<thead>
<tr>
<th>County</th>
<th>White Non-Hispanic</th>
<th>White Hispanic</th>
<th>Black</th>
<th>American Indian</th>
<th>Other Non-White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doña Ana</td>
<td>40.7%</td>
<td>56.0%</td>
<td>1.6%</td>
<td>0.7%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Hidalgo</td>
<td>49.0%</td>
<td>49.9%</td>
<td>0.2%</td>
<td>0.3%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Luna</td>
<td>50.3%</td>
<td>47.3%</td>
<td>1.4%</td>
<td>0.6%</td>
<td>0.4%</td>
</tr>
</tbody>
</table>
The U.S.-Mexico border region is unique in many ways including the fact that a developed and a developing country share a border. Immigration, low levels of socioeconomic status among people in the region, and rapid industrial development and population growth resulting from implementation of the North American Free Trade Agreement (NAFTA) in 1994 help explain the full complexity of the region. These factors all influence the health and well being of the region’s residents. In addition, diseases and environmental hazards on one side of the border directly impact the other side because there are large numbers of people moving in both directions across this international boundary.

There are a number of health issues that are important to understand in assessing the health of this region. Some of the key health issues are:

- Infectious diseases including high rates of gastrointestinal illnesses, tuberculosis, and syphilis;
- Diabetes mellitus;
- Environmental hazards including pesticide poisoning, as well as water and air pollution which pose serious threats to the population and result in numerous infectious diseases from water-borne sources and respiratory problems associated with poor air quality; (Also see the Environmental Health section of this chapter.)
- Behavioral and mental health problems including alcohol and drug use, and depression; and
- Teen pregnancy

Many of these problems are the direct result of the fact that a large number of people in the border region live in poverty, are unemployed, and reside in substandard housing. These conditions create unhealthy environments that are compounded by other social and emotional factors including feelings of being marginalized, loneliness, and fear of deportation. Despite the fact that many residents in the border area are legal workers, but not citizens, these fears of “the system” are real nonetheless. These fears keep people from seeking health care even if it is available.

In addition to the appalling living conditions, many people in this region have little to no access to health care. The three counties that border Mexico were classified in a recent Health Policy Commission report as being one of the lowest capacity areas in the state in terms of medical services. Children are also greatly affected by these poor conditions and lack of services; approximately 18% of the area’s children have no health insurance coverage. Additionally, legal workers that live in the region are not eligible for the few services that exist.

Efforts to improve the health status and living conditions in the border region have had mixed results but have usually been hampered by a lack of funds and poor programmatic coordination of efforts. A continuing issue that must be addressed is access to primary care services. Possible solutions include improvements in funding support for community health services.
centers in the region, since these institutions provide a major portion of care to migrants and the indigent. Creative use of lay health workers (“promotoras”) who can help health care providers serve clients and patients in a broader cultural context may also improve service delivery. Efforts with federal agencies to identify barriers to access and to enroll children in Medicaid and other assistance programs may be another important task. Another way to increase access to services may lie in educational strategies to increase the number of minority health care providers to work in this region. (Fairbanks, 1997)

A key to addressing the vast health needs of the border region lies in the ability for all parties, both private and public sector, to work together. Additionally these efforts must be made on a bi-national basis. The establishment of the U.S.-Mexico Border Health Commission is a step toward achieving this goal. One of the first efforts of the Commission will be to conduct a health needs assessment and to implement actions recommended by the assessment. When the Commission is launched in the Fall of 1999, one of the initial actions will be the approval and release of “Healthy Gente 2010,” the health objectives for 2010 for the border region. These objectives will assist border health systems focus on key health problems and improve the allocation of health resources.

Complementary and Alternative Medicine

A growing area of health care in not only New Mexico, but also the world, is complementary and alternative medicine (CAM), which is also known as integrative medicine. This type of medicine covers a broad range of healing philosophies, approaches and therapies, according to the National Center for Complementary and Alternative Medicine (NCCAM) within the National Institutes of Health. CAM is generally defined as those treatment and health care practices that are not widely taught in conventional medical schools, not generally used in hospitals, and not usually reimbursed by health insurance companies. According to a 1998 survey published in the Journal of the American Medical Association, it is estimated that 42.1% of the U.S. adult population used at least one CAM therapy in the past year. This is an increase from 33.8% in 1990. (Eisenberg, 1998)

In their definition of this type of medicine, NCCAM goes on to state that many of the therapies used are termed “holistic,” which generally means that the health care practitioner considers the whole person, including physical, mental, emotional, and spiritual aspects. Many therapies are also known as “preventive,” which means that the practitioner educates and treats the person to prevent health problems from arising, rather than treating symptoms after problems have occurred. “Alternative” therapies typically mean that an individual chooses to use these therapies alone, instead of conventional medicine, or possibly in combination with other alternative therapies. “Complementary” therapies refer to when an individual chooses to use these therapies in addition to conventional treatments.

Many people may wonder what the basis of this type of treatment is. According to the NCCAM, some of the approaches of CAM are consistent with physiological principles of Western medicine, while others constitute healing systems of a different origin. While some therapies are far outside the realm of accepted Western medical theory and practice, others
are becoming established in mainstream medicine. NCCAM has classified alternative medicine practices into seven major categories. These categories not only include CAM but also more conventional behavioral medicine and overlapping practices which can be either CAM or behavioral medicine, depending on their application. The categories and examples of some CAM practices follow:

- Mind-body Medicine (yoga, tai chi, internal qigong, spiritual healing, intuitive diagnosis)
- Alternative Medical Systems (acupuncture, herbal medicine, massage and manipulation, Native American medicine, Ayurvedic medicine, curandismo, homeopathy, environmental medicine)
- Lifestyle and Disease Prevention (electro-dermal diagnostics, panchakarma, non-orthodox lifestyle therapies)
- Biologically-Based Therapies (phytotherapy or herbalism; special diet therapies including Pritikin, Atkins, Vegetarian, etc.; orthomolecular medicine including supplementation, vitamins and nutraceuticals)
- Manipulative and Body-Based Systems (chiropractic, massage and body work, hydrotherapy, light and color therapy, colonics)
- Biofield (therapeutic touch, Reiki, biorelax, Mariue)
- Bioelectromagnetics

In New Mexico, the most common modalities are herbal medicine, homeopathy, vitamins and nutraceuticals, chiropractic, Native American medicine, massage therapy, acupuncture, and curandismo.

According to the aforementioned survey, “estimated expenditures for alternative medicine professional services increased 45.2% between 1990 and 1997 and were conservatively estimated at $21.2 billion in 1997, with at least $12.2 billion paid out-of-pocket. This exceeds the 1997 out-of-pocket expenditures for all U.S. hospitalizations. Total 1997 out-of-pocket expenditures relating to alternative therapies were conservatively estimated at $27.0 billion, which is comparable with the projected 1997 out-of-pocket expenditures for all U.S. physician services.”

(Eisenberg, 1998) Insurance coverage for most of these therapies is limited. The Eisenberg study estimated complete insurance coverage for 15% of CAM treatments, and partial coverage for 26%. Some plans do cover chiropractic, massage and acupuncture but most of the other treatments are not covered. Plans to cover strictly CAM treatments have been developed and are offered in some parts of the U.S. In New Mexico, the most common modalities are herbal medicine, homeopathy, vitamins and nutraceuticals, chiropractic, Native American medicine, massage therapy, acupuncture, and curandismo.
Mexico, CAM coverage depends on the terms of the policy and is restricted to licensed providers.

CAM is beginning to move into the arena of academic medicine. At the University of Arizona, the Program in Integrative Medicine has developed a program which blends conventional and alternative medicine for medical students and is known for its innovative training programs for physicians. The program is directed by Andrew Weil, M.D., an internationally known expert in CAM.

Environmental Health

The health of New Mexicans continues to be affected by environmental hazards related to population growth and industrialization. To keep up with these changes, state and local agencies and organizations are monitoring selected health problems and environmental conditions. However, improvements are needed in the surveillance systems and way in which monitoring data are analyzed. Currently, health and environmental information are not analyzed together. If they were, they could give early warning signals of health problems and potentially hazardous environmental conditions. This combined information would also provide information needed for better health and environmental response, training and compliance.

Three issues are emerging as the most important environmental health concerns in New Mexico: drinking water contamination related to growing industry and population, air quality in the middle and lower Rio Grande Valley, and contamination and improper labeling of food.

Challenges to the quality of New Mexico’s drinking water are from:

- Increasing use of surface water rather than ground water, which can increase exposure to infectious organisms, and is a growing problem in both Albuquerque and Las Cruces;

- Continuing installation of septic systems in environmentally sensitive areas such as those with shallow ground water or shallow bedrock. Key areas of concern are in Farmington, in and around Santa Fe, Albuquerque, Las Cruces, and Hobbs; and

- Rapid growth in parts of the agricultural industry, such as dairy farming which is booming in the Tucumcari and Roswell areas.

Meeting these challenges requires improving construction and operation of water treatment plants, developing regional wastewater treatment systems, using new technologies as alternatives to septic tanks, developing and implementing plans to protect drinking water supplies, and keeping better track of both illness and water quality.

Air quality has been good in most areas of the state, but population growth and development will lead to major challenges. In the coming years, we can expect increased pollution from motor vehicles, industry, power plants, and housing. Exposure to air pollution from these sources can result in increased respiratory symptoms and illnesses, worsening of asthma, and death from lung and heart disease. In the early 1980s, outdoor levels of carbon monoxide in Albuquerque were high enough to pose a health threat to susceptible individu-
als, including pregnant women and people with coronary artery disease or chronic obstruc-
tive lung disease. Over a ten-year period, Albuquerque’s air was cleared as a result of poli-
cies requiring “no-burn” nights, inspection and repair of emission controls on cars and trucks,
and use of oxygenated gasoline during the winter.

The only area of the state that does not meet federal air quality standards is Doña Ana
County, which has high levels of ozone during the summer. Children and adults with asthma
are affected by exposure to ozone, possibly increasing emergency room visits and hospitali-
zations. These high-level ozone readings result from contaminated air moving north from El
Paso and Mexico. To control this problem, New Mexico will have to work with its southern
borders to reduce pollution from motor vehicles, industry and power plants. (See Border
Health section in this chapter for more information.)

The third area of concern is food quality and safety. New Mexico’s food service industry
faces several new challenges. They include problems resulting from importation of food
from international sources, new and more resistant bacteria, viruses and parasites, and tech-
nical problems, such as improper refrigeration, with small retail food service providers and
catering operations. To ensure safe food delivery, state and local food programs and the food
industry must be supported in their efforts to focus on the main risk factors: time, tempera-
ture, personal hygiene, and cross-contamination. We also need to improve our ability to
identify and track food-borne illness.

Health Promotion /Health Education/Disease Prevention

Health promotion is an evolving component of the health care system. It became some-
thing that governments became interested in as a result of a Canadian Lalonde report in the
mid-1970s. In 1979, the U.S. stated its commitment to health promotion in the publication of
the Surgeon General’s Report on Health Promotion and Disease Prevention and the subse-
quent Healthy People reports in 1980, 1990 and the upcoming 2000 issue. Health promotion
has gone through an evolutionary process in the U.S. moving from a more individually fo-
cused, personal responsibility message of the first Healthy People report to a broader mes-
sage which recognizes the role of other factors in health. (See Chapter 2 for a description of
the determinants of health)

In 1988 the Governor’s Health Advisory Policy Committee described health promotion
as the

science and art of helping people change their lifestyles (health knowledge,
attitudes, and practices) and take greater personal responsibility to move to-
ward a state of optimal health or wellness. Health promotion includes health
consumer education to assist in appropriate health service utilization. Health
promotion at the community level includes support of group and community
efforts to develop safe and healthy environments. Examples of health promo-
tion activities include smoking cessation information programs, exercise, fit-
ness and nutrition activities, and seat belt utilization incentive campaigns.
(GHPAC, 1988)
In addition, the Committee established the following 3 goals for health promotion. Each of these goals was supported by a number of policies and strategies to achieve them.

1. New Mexicans will be knowledgeable about the beneficial values of a healthy lifestyle and will have sufficient information and community support to make appropriate choices regarding health issues.

2. Optimal health status of sub-groups within the population will be promoted in a manner appropriate to the individual needs and special characteristics of the individuals in each group, and

3. The state’s health promotion activities on behalf of its employees will be a model of such programs for employers throughout the state.

Health education has been defined in a variety of ways as well but Glanz describes it as including “not only instructional activities and other strategies to change individual behavior but also organizational efforts, policy directives, economic supports, and community-level programs…. delivered in almost every conceivable setting – universities, schools, hospitals, pharmacies, grocery stores and shopping centers, community organizations, voluntary health agencies, worksites, churches, prisons, health maintenance organizations, migrant labor camps, advertising agencies, and health departments at all levels of government.” (Glanz, 1997) Disease prevention refers to efforts to keep disease from occurring and uses health promotion and health education strategies.

Here are a few examples of health promotion/health education and disease prevention programs in New Mexico:

- Worksite employee health promotion programs that exist in numerous companies across the state, offering programs such as smoking cessation, nutrition, and exercise.

- The Healthier Schools program which promotes the health of students through an eight-component model that seeks to integrate the elements known to support the development of healthy students: nutrition; physical education and activity; health education and life skills; staff wellness; family, school and community partnerships; healthy and safe environment; social and emotional well-being, and health services.

- “S.E.T. (Service, Empowerment and Transformation) for Health New Mexico,” a program of Catholic Health Initiatives in conjunction with the state’s health care organizations, provides a number of health promotion programs for the elderly and underserved. One such program, Get SET for Better Health, is an educational project started in 1994 to foster medical self-care among the uninsured and underserved. Working through local service organizations, Get SET workshops provide participants with a “Healthwise Handbook,” a medical supply kit and skills. Trained volunteers teach participants to become active, equal partners with their health care providers and how to make informed decisions about common medical problems that can be addressed safely at home. The program has been very well received and provided training to nearly 700 clients in fiscal year 1997-98. The New Mexico Human Services Department (HSD) is currently piloting this program for Medicaid enrollees in
Sandoval County. Once this pilot phase is complete, HSD is considering expanding it across the state for all Medicaid recipients.

- Healthier Communities, Turning Point Partnerships and local health councils all focus on community development efforts and community-based planning to promote health. Emphases have included women’s empowerment groups, youth leadership programs, community participation through lifecycle groups, youth job programs, integration of private and public medical services, violence prevention organizing, etc.
- Promotora, lay health worker, and community health representative programs serve many rural locations with basic health information that is culturally appropriate.
- Head Start and other early childhood health education and intervention programs help children get a jumpstart on healthy lifestyles.

A relatively new concern related to these efforts is health literacy. Health literacy refers to “the ability to perform basic reading and numerical tasks required to function in the health care environment.” (AMA, 1999) Findings from recent research revealed that at least one-third of English-speaking patients from 2 public hospitals could not read and understand basic health-related information and material including directions for medication, information on appointment slips or consent forms. These results were even worse with the group that had the greatest need for health care – the elderly and people who reported poor overall health. In 1998, the American Medical Association adopted a series of 5 policy recommendations to support additional training and research for this important need.

Indian Health Care

According to American Indian advocates, the single most important issue facing Indian tribes today is sovereignty or self-determination. This issue is a constant through all facets of Indian life and law, whether it is transportation or Indian child welfare or health care. The concept of tribes and Indian people having the right to determine their own future is a continuous thread running through the fabric of relationships between Native Americans and other governments.

Provision of health care services to American Indians is as complex as many other areas of Indian law. There is a Federal trust responsibility to provide health care to Indians which is based on treaties, legislation and federal judicial decisions. These three components form the basis of a special direct relationship between the Federal government and the tribes in the area of health care. Many treaties, dating back as far as the early 1800s, included medical care as partial compensation for land ceded to the government. Numerous pieces of legislation have established appropriations and other provisions of law regarding Indian health care. The first federal legislation, the 1921 Snyder Act which authorized permanent appropriations for tribal health services, remained in effect until passage of the Indian Health Care Improvement Act of 1976. This law outlined a series of specific health programs and increased appropriations for many Indian health services. The third shaper of the relationship between
Indians and the Federal government is case law. Several key cases have served to crystallize this relationship.

Given this backdrop of repeated affirmation of the Federal responsibility to tribes for health care, the current trend of transferring federal authority to the states is a major concern for tribes. This “New Federalism” movement that shifts responsibility for funding and administering federal programs to state governments leaves tribal leaders wondering how they are to fit into this new landscape. Tribes are accustomed to a direct relationship with the Federal government and have frequently clashed with state governments over a variety of issues. In the new era of state-managed programs such as Medicaid and welfare reform, many tribal leaders feel that their relationship with the Federal government is being jeopardized.

In New Mexico’s health care arena, the advent of Medicaid managed care has been particularly difficult for Indian leaders. Before the state’s plan was approved by the Health Care Financing Administration, numerous Indian representatives expressed concern about the terms of the program as they applied to health care delivery to Native Americans throughout the state. They felt that the plan did not include adequate provisions for working with the Indian health care delivery system – the I/T/U system (I= Indian Health Service units; T= tribes that have contracted or compacted for health care services; U = urban Indian clinics). Since the implementation of Salud! in 1997, many tribal leaders feel that Indian health care needs in the state have been negatively impacted. Some of the issues raised by tribes include:

- Although a joint powers authority exists, no process of formal consultation has been followed to protect the health care interests of New Mexico Indians;
- Most Indian people do not understand the Medicaid managed care process;
- Many people do not even know they have been assigned to a managed care organization (MCO);
- MCOs don’t understand and have not addressed the nature of problems in isolated areas of the state where transportation and access to phones can present major barriers to care; and
- About 80% of New Mexico’s Native American Medicaid recipients are still using the Indian health care system.

There have been concerns about the process for reimbursement by the MCOs to IHS for services as well as the overall fiscal impact on IHS. Dissatisfaction with the current state of the system has spurred discussions of creating a Native American HMO or having IHS become an MCO to contract directly with the state. This, too, concerns some Indian advocates because they believe it fails to adequately address what they believe is the underlying issue of the Federal trust responsibility to tribes.

Another key issue for tribes in the state is the overall impact of P.L. 93-638 (The Indian Self-Determination Act, as amended), which authorizes tribes to contract or compact with the federal government to run the programs the Indian Health Service has traditionally provided. In essence, this law allows tribes to take over their own health care system and structure it...
however they chose. New Mexico tribes have chosen not to accept this responsibility as quickly as other tribes across the country. For example, in Alaska, all of the tribes there have contracted or compacted their health care services. Within the Albuquerque Area of IHS, only Alamo and Isleta have completed the process and Jemez is close to finishing its “638” process once the Federal moratorium is lifted. The Navajo Nation is close to completing the 638 process as well.

Other issues and concerns raised in talking with Indian health officials and advocates include:

- Lack of dental services, especially for the urban Indian population with the closure of the clinic at the Southwestern Indian Polytechnic Institute (SIPI);
- Lack of mental health services;
- Barriers to health care including distance to services, lack of transportation, language;
- Shortage of long-term care programs or other services for elders, and
- Too much talk about problems and not enough action.

Native American Turning Point Project: The Jemez Pueblo Example

The Native American Turning Point Project (NATPP) is part of the overall “Turning Point: Collaborating for a New Century in Public Health” program that is funded by the W.K. Kellogg and Robert Wood Johnson foundations. In New Mexico, the Public Health Division of the New Mexico Department of Health led a broad-based effort to win Turning Point funds. The Native American Project is one of several task groups and is focusing on promoting development of public health systems in New Mexico’s Native communities. This process is closely linked to tribal self-determination and economic development. As more tribes move toward taking on their health care, some are veterans in the area while others are just beginning to explore the issue. One of NATPP’s main tasks is to help tribes learn from each other through supporting sharing of tribes’ experiences in developing such systems.

Jemez Pueblo illustrates the sort of development tribes can accomplish. Jemez has successfully used the “638” process of Public Law 93-638, the Indian Self-Determination and Education Act, to take over many IHS functions. Jemez has been one of the few tribes in New Mexico to establish a tribal health department. The department began in 1992 with community health representatives and substance abuse programs. They have since added six more 638 contracts, including social services and disabilities, and have expanded their department staff from six to 33. Jemez has also obtained funding through foundation grants and third-party billing. Their future plans include contracting for their clinic and dental clinic once Congress lifts the freeze on 638 contracting. The Pueblo hopes that this moratorium will be lifted in October 1999.

Taken from “Turning Point: Newsletter of the New Mexico statewide Native American Turning Point Project,” Issue Number 1, January 1999.
Oral Health

Oral health, more commonly known as dental health, is frequently one of the forgotten elements of the health care system; however, it has great importance in the overall health of an individual. Good oral health is part of general health. Beyond this, recent research provides data that link poor physical health with poor oral health. For example, there are strong associations between

- periodontal disease and cardiac disease,
- compliance with treatment for diabetes mellitus and periodontal disease, and
- low birth weight or premature birth and poor maternal dental health.

Problems with availability of dental services have been a long-standing issue in the state. According to the 1999 Household Survey conducted for the Health Policy Commission, 61% of respondents indicated that they needed dental services in the past year. Of those respondents, 16.5% stated that they were able to receive services only part of the time or not at all with wide variations across the state. Fifty-five percent cited ability to pay as the primary reason for not being able to receive services. Insurance coverage for dental services is limited; only 21% of the New Mexico companies who offer health insurance (51% in 1993) provide dental coverage.

One of the key reasons for the difficulty in accessing services is that there is a lack of dental providers, particularly in rural areas. In some counties of the state, such as Catron, Guadalupe and Harding, there are no dentists at all. Another shortage exists for providers that will accept Medicaid. Recent data show that the few providers available to Salud! patients are extremely overburdened. For example, in Bernalillo County, a general practice dentist has on average nearly Salud! 8,300 patients, which is more than 4 times the general practice guidelines for patient load.

There are several reasons for the state’s dental provider crisis. Since New Mexico does not have a dental school, there is no existing built-in recruitment mechanism to supply the state’s needs for dentists. The costs of operating a dental school in the state are prohibitively expensive. Another factor for the shortage of providers is that the licensure process in the state has been, until recently, very cumbersome and discouraging to dentists moving in from another state. The third major reason for the short supply of providers is that there is very little financial incentive to practice in the state, especially to open the practice to Medicaid patients. The current Medicaid reimbursement rate is 45% of billed services but the average dentist has an overhead expense rate of 70%.

This issue is not going without attention. In the 1997 legislative session, House Joint Memorial 17, which dealt with health care professional supply and distribution, also studied dental access and developed recommendations for the 1999 legislative session. In 1998 Senate Joint Memorial 21 developed a task force to study the barriers to oral health care in the state and the task force has just completed its report. Through these efforts, a number of solutions have been implemented to address the oral health needs of the state:
• Increase incentives to see Medicaid patients. Beginning October 1, 1999, Medicaid will reimburse dentists, 85% up from the current 45% reimbursement rate.

• Increase the numbers of dentists in the state by facilitating licensure in New Mexico by allowing licensed dentists in good standing from another state to be licensed without retaking the practical or clinical examination.

• Give dental hygienists the ability to practice collaboratively with dentists and provide dental hygiene services outside of the dental office in schools and clinics.

Persons with Disabilities and the Developmentally Disabled

According to a report by the New Mexico Department of Health, a disability is a gap between a person’s physical or mental capabilities and the demands of his/her social and physical environment. Federal law defines a person with disabilities as being any person who has a physical or mental impairment, which substantially limits one or more major life activities. These activities include self-care, communication, learning, mobility, self-direction and economic self-sufficiency.

Persons with Disabilities

In 1981, the National Center for Health Statistics estimated the population of persons with disabilities to be 14.4%. Rates seem to have increased in the 1990s and data suggest that approximately 16-18% of Americans experience an activity limitation due to impairment or a health condition. About 250,00 New Mexicans have a disabling condition and about half of them have a severe disability.

Persons with disabilities face a wide array of challenges in their daily lives and the needs of individuals can be quite different depending on their disability. For example, the needs of a person in a wheelchair will be different than that of a person with a hearing impairment. Some of the areas of concern for persons with disabilities include the following:

• Depression

• Mental health services

• Employment

• Environmental barriers

• Transportation

• Housing

• Public health surveillance and health promotion

In the 1999 legislative session there were two critical bills that were supported by the disability community. Senate Bill 724 – the Consumer Direction Act, made it easier for persons with disabilities to get personal care services under Medicaid. This bill, which passed but was vetoed by the governor, provided Medicaid funding for self-directed care or agency-based care to assist the disabled population with activities of daily living. A goal of the legis-
lation was to provide support for many younger people with disabilities or lucid elders so they could live at home but have support of a caregiver to help with dressing, feeding, etc. The second bill allowed persons with disabilities who become employed to maintain their coverage under Medicaid by “buying in to the system.” This bill also passed and was signed by the governor.

The Developmentally Disabled

It is estimated that 1-2% of the population have a developmental disability (DD) which is a condition that affects learning, communication, the ability to care for one’s self, and the ability to walk and physically move. A developmental disability can start before birth, at birth or before age 21. In New Mexico a conservative estimate would be that 20,000 individuals have some sort of developmental disability, of whom 1,500 to 2,000 have a severe or profound disability.

Earlier this decade, the state of New Mexico made a commitment to transition all 480 residents of its two long-term care facilities for people with mental retardation into the community. The process was completed in July 1997 with the closure of the Los Lunas Center for Developmental Disabilities, Ft. Stanton having been closed earlier. With the closure of these facilities, New Mexico moved to a community-based program to serve people with DD instead of large state-run institutions. These individuals live around the state but are concentrated in urban areas where there are more resources and services.

Prior to the closure of these facilities, an effort was made to identify primary health care providers throughout the state and to inform them about developmental disabilities. By 1999, that process has been successful and today most individuals with DD have their own doctor and an increasing number of physicians are opening their practices to these patients. Despite this success, there is a need to improve the quality of health services provided to these patients. In addition, ongoing training and coursework in areas of disability should continue to be part of health professionals’ training.

The DD health care system is financed primarily with Medicaid funds, specifically through the DD Medicaid waiver. Few individuals with DD have other medical insurance. Over the last 10 years the budget allocated to people with developmental disabilities has more than doubled. In 1996 alone, the total budget in this category was $126.2 million.

Some of the most significant pressing needs include:

- Providing a system of continued quality improvement to monitor and implement different strategies that have an effect on access, service and quality of life;
- Ensuring appropriate mental health services, especially in rural areas;
- Providing dental services;
- Dealing with the growing needs of the elderly developmentally disabled population;
- Improving access to specialists;
- Ensuring ethical approaches to decision-making;
Many of the major improvements in the health of the American people have been accomplished through public health measures. Control of epidemic diseases, safe food and water, and maternal and child health services are only a few of the public health achievements that have prevented countless deaths and improved the quality of American life. But the public has come to take the success of public health for granted.

Health officials have difficulty communicating a sense of urgency about the need to maintain current preventive efforts and to sustain the capability to meet future threats to the public’s health.

The Future of Public Health
Institute of Medicine, 1988
An example of how this shift in focus is occurring can be illustrated in how the PHD is dealing with the issue of domestic violence. In this example, staff worked with a community by convening a group to address this issue and by developing partnerships among a variety of community members including women’s shelters, the legal community, law enforcement, emergency medical services and the schools. Direct services were not provided in this example but rather PHD staff served an activation role by coordinating and facilitating community-led solutions to the problem.

Another example of the shift in roles is how PHD is working with local health councils. Health councils are being developed across the state and are serving to pull together members of the community to identify and work on their most pressing health concerns. The role of PHD in these councils is to facilitate their development and to help convene interested groups of community leaders to work on health matters.

**Rural Health**

In a state like New Mexico, the term “rural health” almost applies to the entire state. The geographic spread of the state (121,598 square miles, 5th largest state in land mass covering an area larger than all of New England, New York and New Jersey combined) and its sparsely populated nature (an average of 14.3 people per square mile making it the 43rd least populated state as of 1997) increase the challenges of delivering health care services.

What’s really rural? There are several differing definitions and these variations can have an impact on funding opportunities available to a community. For example, Cuba may be considered “rural” under one definition but not under another. According to the 1990 Census, 56% of the state’s population lived in metropolitan areas. Sixteen of the state’s 33 counties are considered “frontier” (with a population density of less than 6 people per square mile), 15 are considered rural (population density between 6 and 100 people per square mile), and only 2 are considered urban (with more than 100 people per square mile). The Office of Management and Budget (OMB) identifies Metropolitan Statistical Areas (MSA). Rural areas are considered to be any whole county that does not contain a MSA. This designation creates problems for counties like Sandoval County which has Rio Rancho on one end, with significant areas to the west which will not be considered rural for OMB purposes. New Mexico MSAs are the following counties: Bernalillo, Doña Ana, Los Alamos, Sandoval, Santa Fe and Valencia.

Demographically, rural areas tend to have higher levels of poverty, more elderly, greater numbers of uninsured, higher levels of unemployment, and lower paying jobs. Lack of insurance is a problem because rural areas have few large employers that can offer insurance as a benefit. Because of a larger elderly population, rural New Mexico has a greater percentage of the population on Medicare. Likewise, because of greater poverty, more rural residents tend to be enrolled in Medicaid than the rest of the state.

Barriers to health care access that exist in other areas are even more complicated in rural areas. Barriers in rural areas include geography, lack of transportation, language, and cultural beliefs and norms that may not be respected in the typical clinical setting. These barri-
ers are further complicated by institutional factors such as a lack of providers and facilities as well as changing delivery and financing systems resulting from managed care. A question raised by many providers in rural areas is how urban-based managed care organizations can truly understand the needs and the capacity of rural settings. Many wonder how (and if) community health centers can survive a capitated system. An example of this is the current payment system under Salud! which has created problems for rural areas because the discounted or capitated rate is less than the actual costs of service. Congress recently approved a measure to have the Federal government supplement the difference to rural providers but payments reduce again in 2000.

Money is always an issue in these areas. Key questions for rural areas are: What can be sustained financially? and What is necessary for the community? Community hospitals have always been a symbol of pride and self-reliance for rural areas but many of these resources are slipping away because they are not self-sustaining. Roosevelt and Valencia Counties lost their hospitals in the past ten years and more may be on verge of closing. Funding changes have made the availability of home health care a major concern in rural areas. As a result of the Balanced Budget Act of 1997, several home health care providers no longer provide service in rural New Mexico. Here again there is Congressional activity underway to address the problem.

The supply of health professionals is an ongoing concern in rural areas. Many providers of all types tend to not want to be in these areas. Remoteness, isolation, lack of resources, and family concerns such as education for their children are perennial challenges for rural practitioners. There are some UNM programs that offer support and relief for rural practitioners (locum tenens and the specialty extension services) and those programs are getting more and more requests each year for assistance. (See Chapter 3 for additional reasons why people to practice or not practice in rural areas.)

Many experts in rural health believe that a strong network of community health centers is a key in solving the problems. But how can effective networks be established and maintained? Regionalization of local communities as well as better integration of services between the Department of Health and community health centers have been raised as solutions. Better systems of communication and coordination among the network of providers is also needed. These networks need to create a seamless system of care. If a patient is to be re-

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I’ve heard literally thousands of medical students come to this medical school saying that ‘I want to practice medical care in a rural area’ – if all the people that have told me that [were practicing there], we would have such a surplus that it would be unbelievable. It takes a unique individual to want to practice in Catron, Harding or Mora counties.”

– INTERVIEWEE

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ferred to another provider in another area of the state, there needs to be good communication and coordination, in addition to transportation, to make sure that the patient’s needs are met. Telemedicine also offers opportunities for rural areas but systems need to be in place to assure that the remote consulting provider can accept a patient if the person needs care that is not available locally.

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**Medicine by video saves lives from afar**

Telemedicine – medical care by live video carried over telephone lines – may one day change the face of medicine.

It has already changed the lives of a Las Cruces woman and her baby.

The baby’s birth was traumatic – for both mother and child. The mother had to have a Caesarean section, and the newborn experienced severe bruising from a bleeding disorder.

He needed specialized medical treatment not available at the Las Cruces Memorial Medical Hospital, but offered at Albuquerque’s University Hospital – almost a four-hour drive away.

The infant could not wait that long to receive care, and the new mother was too weak to travel.

But – thanks to telemedicine – the infant received immediate medical attention from University Hospital during his emergency trip to Albuquerque, and his mother was able to keep in touch with her baby without leaving Las Cruces.

During the infant’s ambulance ride from Las Cruces, Dr. Dale Alverson was at University Hospital, examining him by means of a video-phone, a device that connects a telephone line to a camera and a television set.

Alverson was able to determine proper treatment for the infant, and by the time the infant arrived at University Hospital, the treatment plan was already underway.

“Being able to see the baby allowed me to think of things that I might not have…just from verbal communication” with the hospital staff in Las Cruces, Alverson said.

The infant continued to receive treatment at University Hospital’s intensive care unit for a few days, and his mother – who had to stay at the Las Cruces hospital to recover from the delivery – was able to “visit” him using the video-phone.

Using telemedicine devices such as the video-phone, University Hospital can extend a variety of medical services – and expertise – not available in rural areas of New Mexico….

University Hospital can set up teleconferences with smaller hospitals in New Mexico towns including Las Vegas, Santa Rosa and Roswell.

These teleconferences provide a low-cost way for doctors at University Hospital to treat patients at rural hospitals — whether by direct examination or by consultation with a local care provider.

The telemedicine system actually allows doctors at University Hospital to perform long-distance physical exams, by using cameras attached to stethoscopes, ear-nose-throat scopes, dermascopes (for examining skin), and even cardiac or fetal ultrasound machines….

*The Albuquerque Tribune, August 16, 1999; Reporter, Dan Stimson
Used with permission. Permission does not imply endorsement.*
Training of Health Care Providers and the Role of Academic Health Centers

Preparing health care professionals in New Mexico is a task that is shared among many hands. More than two dozen colleges, universities, community colleges and proprietary schools are accredited to train a wide variety of health care professionals. According to the “A Blueprint for Change” report issued in response to Senate Joint Memorial 36 in 1996, the primary oversight entity for public post-secondary education is the Board of Regents at each institution. The New Mexico Commission on Higher Education (CHE) has statutory responsibility for the overall planning and coordination of post-secondary education. They are responsible for budgetary review and recommendations (with the exception of the School of Medicine and its associated programs which are historically funded) as well as approval of new graduate degree programs and associate degree programs at 2-year vocational-technical schools. CHE does not approve bachelors programs or 2-year associate degrees from branch campuses of 4-year colleges. (HPC, 1996)

Another participant in providing higher education for health professionals is the Western Interstate Commission on Higher Education (WICHE). New Mexico is a member of this consortium, which allows New Mexican students to attend health professional education programs as well as other educational programs in member states at the in-state tuition rate. WICHE has been particularly useful for dental students since the state has no school of dentistry. Currently 19 New Mexico students are attending dental school through this program and there are 86 alumni, of which 59% practice in New Mexico. A new service requirement for students using WICHE has recently been implemented to require students to return to the state after completion of their dental degree.

As has been noted in several other sections of this report, New Mexico faces shortages in the supply of health care professionals, especially in the rural areas of the state. The University of New Mexico (UNM) Health Sciences Center has undertaken a number of efforts to increase the number of providers that are trained in the state and stay in the state. As one interviewee put it, “For medicine and most of the allied health professions, the issue isn’t that enough providers aren’t cranked out but rather it is getting enough people to stay.” Giving students an opportunity to experience what it would be like to practice in a rural area is a major focus of UNM’s training. One of these efforts is the “1+2” program which provides medical education to family practice residents in community-based settings for the last 2 years of their training. Seventy-five percent of the residents that graduate from these programs establish practices in the most medically underserved areas of the state.

Increasing the capacity for health care professionals to work together with a variety of different disciplines is another training effort. Such multidisciplinary training is the future of health care in general but is even more important in a rural area where there is likely to be only a few providers, maybe one in a discipline. These providers need to know how to work alongside each other and to know the strengths, advantages, and skills of their colleagues. One such interdisciplinary program at UNM places students from more than 11 disciplines into rural settings for a summer learning experience. This program, funded by the federal Health Resources and Services Administration, has supported the placement of more than
500 students in the following communities: Roswell, Hobbs, Silver City, Las Vegas, Artesia, Mountainair, Carlsbad, Farmington and Estancia.

In response to the changing health care climate, many health professional programs are restructuring to provide their students the necessary skills to meet the challenges of the day. For example, many nursing faculty believe that in order to meet the diversity and complexity of health care in New Mexico, it is important to restructure the basic registered nurse workforce so that a substantially larger number of nurses hold baccalaureate or higher degrees in nursing. Additionally, nursing has focused attention on their graduate programs because nurses in advanced practice (such as nurse practitioners and nurse midwives) are able to provide primary care as well as clinical expertise and patient care in acute care settings. Recent program expansions to train physician assistants, pharmacist clinicians and other mid-level providers contribute new sources of practitioners for communities, particularly the medically underserved areas. Some question why other institutions such as health care delivery organizations aren’t more involved in training health care providers and suggest that those who benefit from the training take a more active role in ensuring and providing it.

Another program that has been recently developed is the Masters in Public Health programs at both UNM and New Mexico State University. These programs, although not involved with the development of clinical skills, are designed to teach epidemiologic skills as well as an understanding of population health and prevention. Public health skills are key to developing a “new” health care system that could serve the needs of the state.

UNM Health Sciences Center is in a unique position in the state. As New Mexico’s only academic health center, it offers the opportunity to provide the “added value” of research, educational experience to patient care and to communities. The term “academic health center” (AHC) refers to an institution that consists of one medical school, one teaching hospital, and at least one other teaching program. In 1997, there were 105 AHCs in the U.S. according to the Association of Academic Health Centers. (Anderson, 1999)

Since academic health centers are charged with the responsibility of providing education, research, and patient care, they operate differently than an ordinary hospital and, as a result, AHCs are more costly to operate. Funding for these institutions comes from a variety of sources including federal and state funds, patient revenues, third party payment, and other private sources. Over the past 3-5 years, two primary funding sources, a portion of which covered medical education, have been reduced: 1) payments from third-party insurers and 2) federal payments, including Medicare and Medicaid. Third party payments have reduced as managed care organizations have expanded and have ratcheted down fees to AHCs, and federal payments have dropped as a result of the Balanced Budget Act of 1997 and changes in Medicaid. These losses in revenues have left many AHCs in a financial bind and some institutions are considering mergers with for-profit health care organizations, forming alliances with other organizations or declaring bankruptcy. For UNM these losses have been difficult but they are viewed as a “challenge.” As stated by Dr. Philip Eaton, Interim Vice President for Health Sciences, “If you gut the core of this mission – education, research, and patient care – for fiscal benefits, then you have lost the war.”
Other Concerns/Influences

A variety of other concerns about our health care system warrant at least a passing mention for consideration:

- Many consumers today have access to a wide array of health information that can be helpful in dealing with any number of health concerns. In addition to numerous books and magazines, there are an exploding number of websites that offer information to help individuals diagnose and treat illnesses. A concern that many health care professionals have about some of these sources of information is that they may provide the wrong information. Having access to such a wealth of information is an asset only if the consumer is educated and can discern good information from bad. This is particularly a problem with the growth of Internet websites because the poor sources of information can look just as good as reliable sources. An informed consumer is the best defense against bad information but unfortunately many people are not adequately informed on these issues.

- Unlike 10 years ago, pharmaceutical companies are now marketing their prescription products directly to the consumer through extensive advertising in magazines, newspapers, television as well as the Internet. Today patients ask their provider to prescribe a specific drug by brand-name instead of leaving the choice up to the provider. Many of these drugs may not be medically necessary but the patient wants to have the same effect as described by the advertisement. Additionally, the cost of these drugs is typically greater than generic alternatives which runs counter to the current trend of having a limited formulary which is set by the managed care organization. Drug costs have been the fastest growing component of personal health care costs since 1996.

- Health care, like may other things in our society, has become so complex that many people just can’t find their way though the system maze. Dealing with everything from multi-step automated phone systems and voicemail to figuring out what is a covered benefit is more complicated, especially for the elderly or someone who does not speak English as his/her primary language. Technology, which has advanced health care in so many ways, frequently seems to be a barrier for someone seeking care – especially if they have to wend their way through a system that has them, for example, “key in your name on your phone’s keypad, using 1 for Q…."

- The privacy and confidentiality of health information has come under increasing scrutiny in recent years both at the federal and state level. Since so much personal medical information is stored on computers, it can be transmitted easily without a person’s knowledge or permission. Additionally, as research tells us more about the human genome and tests become more available to let an individual know his/her susceptibility to a particular disease, this information could be quite valuable to insurers, employers, etc. The U.S. Department of Health and Human Services recently released a set of recommendations for states to use in assessing their health privacy laws. In
New Mexico, House Joint Memorial 20 passed unanimously in the 1999 session which requested a study of health data privacy and confidentiality, as well as health data security standards, be undertaken by the Health Policy Commission and the Health Information Alliance. A final report and recommendations is to be presented to the Legislature by October 1, 2000.

- Despite the efforts of many people providing programs in both the public and private sector, large numbers of people are not aware of many health programs and services that are available. Program planners need to take extraordinary efforts to publicize their efforts as widely using as many media as possible to ensure that the public knows about the program. Highly targeted efforts are necessary to “cut through the clutter” of today’s information overload. Nontraditional means of communication need to be considered such as relying on informal networks of people instead of the traditional media.

- Culture and language continue to be barriers to care and they need to be addressed if health care is to be delivered effectively. Efforts to deliver health care in a culturally appropriate manner have been on the increase but still have additional ground to cover. Increased interpretative services are also needed so as to provide the best possible health care to persons who may not speak English as his/her native language.
Sources:

Aging of the Population

Behavioral Health/Mental Health


National Institute of Mental Health website: http://www.nimh.gov/about/index.cfm
National Mental Health Association website: http://nmha.org


Border Health Issues
Note: Special thanks to Dr. Jeffrey Brandon of New Mexico State University who prepared this section


Committee on Health and Social Implications of Increased Trade along the Border Region. (1994). Preliminary recommendations for the 1994 border governors conference. Tijuana, Baja California.


**Complementary and Alternative Medicine**


**Environmental Health**

*Special thanks to the Department of Health and Dr. Bill Lambert for the preparation of this section.*


**Health Promotion /Health Education/Disease Prevention**


**Indian Health Care**


U.S. Health and Human Services, Public Health Service, Indian Health Service. IHS: Albuquerque Area Indian Health Service.

**Oral Health**

Health Policy Commission staff (1999, August 26) Senate Joint Memorial Data Analysis and Findings. Presented at the Health Policy Commission meeting on August 26, 1999.
The Developmentally Disabled and the Disabled

Special thanks to Drs. Sharon Witemeyer and Javier Aceves for their assistance in preparing this section.

Proceedings from the town hall on developmental disability hosted by the Continuum of Care program at the UNM Health Sciences Center. The website can be accessed at http://star.nm.org/coc


Rural Health


Training of Health Care Providers


University of New Mexico Health Sciences Center (1999, January) “Health Care for Today, Research and Education for Tomorrow.”

Chapter 6:

Philosophy, Policy and Public Dialogue

Summary

- Pooling our limited resources in some way probably is necessary to cover costs of medically necessary care.

- Organizations that “hold the pool of resources” have the ethical obligation to balance individual and population health, as well as health professional education/training.

- For-profit and not-for-profit approaches have both benefits and limits when applied to financing health care delivery.

- The 1990 Town Hall, “Health Care: Rights and Privileges,” issued a set of policy recommendations, some of which have been achieved.

- Concrete statements of values, principles and goals should direct public dialogue.

- Public dialogue should be organized, respectful and candid. (See Oregon’s experiment with community dialogue leading to prioritization of covered benefits.)

- How should New Mexico design and deliver health care?

- “Efficiency” is a goal-dependent measure.
For all but the very wealthy, access to adequate, lifelong, affordable health care can only be secured by individuals pooling their resources to cover the costs of medically necessary health care services. If we agree that health care is a basic good, and if individuals have entrusted a portion of their resources to the pool in order to assure themselves reasonable access to that basic good, the holder of the pool (whether a for-profit or a nonprofit managed care organization) has ethical obligations to be a good fiscal steward and a good steward of both individual and population health. (Gervais, 1999, p. 9)

How should we balance individual needs and responsibilities with population health interests? Should we treat health care as a basic good or as a commodity? Is access to affordable, quality health care services a right or privilege? If universal access is an agreed-upon goal, should it promise a basic or comprehensive benefits package? If at least a basic package is provided, would it cover only preventive and primary services? (If an individual has cancer, for example, far more extensive services are “basic.”) What is the proper role of for-profit enterprises in delivering health care services? Are we maintaining the important fiduciary relationship between physician and patient? Are we treating members of vulnerable populations fairly and respectfully? Has our community established a “moral compass” by which to direct delivery of health care services?

A central question facing those making health policy in 1999 is whether we should distribute health care through the market mechanism, which is the way we distribute almost all other goods and services (including necessities like food and housing) in this society, or whether we should employ some other more centralized mechanism to distribute health care more equitably throughout society. While we have clung to the market as our distribution mechanism, the health care market has changed from a retail market where patients buy goods and services to a wholesale market where employers, governments and individuals buy “coverage” for their employees and families. Our ambivalence about this financing mechanism is demonstrated by our continued support for Medicare and Medicaid, and the enormous subsidy we give to health care purchasers through the Internal Revenue Code. The market is powerfully influenced by government policy insofar as almost half of health care purchases are made by governments.

The resolution of this essential question depends on whether health care is just another commodity, or whether it is different from other goods and services in a way that would justify these government subsidies and intense regulation. What is it about health care that warrants its special status? Is it because it is a necessity? Because it requires special expertise? Because its cost can be so large and that cost is so randomly borne by individuals? Each of these reasons for the special status of health care, and the many other reasons that may be offered, may justify an entirely different set of government actions in the health care system.
It is common in debates of social philosophy and public policy to focus either on grand concepts and “big” questions, or on the minute and intricate details of structure and procedure. This chapter will hover somewhere in between, as we review:

- Past proposals for improved health status and health care delivery in New Mexico.
- A sampler of goals and values to consider when (re)designing health care delivery systems.
- New Mexico’s commitment to the health of its citizens as we enter the 21st century.

But first, a glimpse back in time, to Germany, immediately following World War II.

For 11 years, I lived with my family in a toolshed that was barely bigger than this office. My mother, a grandmother, and five children, one a baby, another very sickly, had to make do in primitive living quarters. We children slept in two double-bunk beds and a crib. The toolshed was part of a former furniture factory that had been confiscated by the local government.... Space was tight. There was never any running water, we carried it from a creek about 200 meters away. We cooked on a wood stove and had to steal the wood to fire the oven. We had to steal our food while going to and from school.... My father, a former chemist, had been captured by Americans as a prisoner of war in Austria, and, although treated kindly, was never able to return to work. My mother did not work. We were always broke.

And, yet, we never had to worry about our education and our healthcare. It was free. I was able to complete only 10 grades, but I had five years of Latin, three years of French, and all the basics. I believe it was better than a high school education in the U.S.. I was healthy, but my brother had diphtheria and polio. When we needed medical care, we got it at the local hospital, no questions asked. When you were sick, society was there for you.

Uwe Reinhardt, Ph.D.
James Madison Professor of Political Economy
Department of Economics and Woodrow Wilson School of Public and International Affairs, Princeton University
New Mexico First: October 1990

Nearly a decade ago, participants in New Mexico First’s Town Hall #7 issued the following seven “Policy Statements” regarding how health care should be provided in New Mexico:

1. A basic level of health care services should be made available to everyone. It must be paid for by society, if necessary, for those segments of the population that cannot otherwise afford it.

2. Basic services should emphasize education, prevention and primary care and not require great additional expenditures for construction of new facilities or acquisition of medical technology.

3. Funding of a basic level of health care services must be both politically and economically acceptable to those who are asked to bear the burden.

4. Health care needs should be prioritized, with the highest priority areas being given greatest allocation of resources.

5. An individual’s inability to pay for basic health care services should not be a factor in determining whether or not these services are available to that individual.

6. Persons with the ability to pay for more extensive services should have the privilege of doing so. Government mandates placed on the level of medical services an individual may obtain through expenditure of personal resources are politically unacceptable and should not be endorsed.

7. Significant reform of the private health industry and the public programs of Medicare and Medicaid is warranted.

A question for 1999: Are these “Policy Statements” as readily acceptable now as they were nearly a decade ago? If yes, have any of the reasons for accepting them changed?

The 1990 Health Care Town also issued the following recommendations. Status of the recommendation including actions subsequently taken on these are noted in italics.¹

¹ Note: Information noted here on the status of a recommendation and action taken was provided by the New Mexico First Scoping Committee’s work in preparation for the 23rd Town Hall on Health Care.
1. A state health policy, including the definition of a basic level of health care services; a process that insures community participation and draws upon the work already performed by organizations such as the Governor’s Health Policy Advisory Committee (GHPAC), New Mexico Health Decisions and New Mexico First. GHPAC should be enacted into law and charged with the responsibility of coordinating the comprehensive health policy.

   *Statute enacted in 1991 with state health policy and establishing the Health Policy Commission.*

2. Master plan for implementation of “basic health care.”

   *A comprehensive state health plan has not been developed.*

3. Methods of cost containment, development of an inventory of available resources, and reallocation and more efficient use of resources pursued to provide a basic level of care.

   *County-supported Medicaid Fund that utilizes county indigent funds to leverage additional federal Medicaid match. Change in use of county indigent funds to shift from reimbursement of hospital and selected other services to support for health services like primary care, prenatal care.*

4. If actions in #3 do not support a basic level of care, revenue-raising measures must be considered: sin taxes, elimination of gross receipts tax exclusions, tort reform savings, maximization of federal Medicaid match.

   *Increased to 185% of poverty, eligibility for Medicaid for children, pregnant women and infants, and family planning services. In process of planning and implementation of Title XXI (State Children’s Health Insurance Program).*

5. Third party payers’ policies and practices should encourage prevention, early intervention and education.

   *No action noted*

6. Medicaid prenatal care for those up to 185% of poverty.

   *Accomplished.*

7. Increase health care manpower in rural areas by revitalizing National Health Service Corps; expanding state scholarship programs; providing additional rural practice sites.

   *State health service corps established; state scholarship and loan programs expanded and standardized; UNM has established and expanded its rural family practice residency sites.*
8. Legislative study panel with broad representation to make recommendations regarding medical liability reform.

*Issue was studied and recommendations made and enacted.*

9. Retain the current Medical Malpractice Act until a better system is adopted.

*Current Act amended but has not been replaced.*

10. Health and Environment Department prepare and maintain an information network of all private and public health care services and practitioners and fund the network.

*Department of Health maintains a variety of information on health care services but it is not coordinated or available from a single access point.*

11. Assure that mental health care, prenatal care, substance abuse treatment and chronic care are available in all regions of the state, targeting alcoholism and prenatal care.

*Department of Health is implementing a system for managing behavioral health care for persons who do not have access to services through third party payers. Medicaid expanded to 185% of poverty for pregnant women. Expansion of Families FIRST that provides case management for pregnant women on Medicaid. Working to maximize use of Medicaid waiver slots for the developmentally disabled and the disabled and elderly. Establishment of HB 372 interagency task force to develop a comprehensive public/private system of long term care.*

12. Congressional delegation work to eliminate the urban/rural differential for Medicare reimbursements.

*No action noted.*

13. Legislation to allow higher Medicaid payments to rural providers and to those whose practice includes a large proportion of Medicaid recipients and the uninsured.

*Several attempts made but now moot because of Medicaid managed care.*

14. Streamline and consolidate paperwork and eliminate unnecessary structures in all aspects of the health care system.

*Presumptive eligibility process for children and pregnant women seeking Medicaid.*

15. Legislative memorial recommending Congress enact the national health care reform proposals.

*No action noted.*

16. Utilization of actuarial experience of the insurance industry to develop and manage an insurance package for the uninsured which may or may not be linked to employment.

*Modified community rating for insurance packages for small businesses. Health Insurance Alliance. Health Care Minimum Protection Act.*
Other 1990 Town Hall recommendations included:

1. Ethics committee to recommend policies for certain ethical issues to serve as a guide by which ethical questions may be resolved.

2. Creation of a statewide risk pool for uninsured individuals, with all health insurance companies doing business in the state taking a small fraction of this pool.

3. Development of effective health insurance options for small businesses and the underinsured.

4. Creation of a quasi-private corporation competing with private health insurance companies, to serve the uninsured.

5. Greater integration of various federal medical facilities into a statewide health care system.

**Values, Principles and Goals**

Three years later, in 1993, the Ethics Working Group for the Clinton Health Policy Task Force urged policy makers to consider the following statement of values and goals when undertaking any reform or redesign of the health care delivery system: All such efforts must reflect “fundamental beliefs about community, equality, justice and liberty. These convictions anchor health reform in shared moral traditions.” (White House Domestic Policy Council, 1993, p. 11) Which is to say that, while we may not all agree on the order of priority for these basic principles, we can agree that our public policies:

- Should aim for the betterment of society;
- Should treat people equally with respect to fundamental rights and duties;
- Should be fair when not all goods can be distributed equally;
- Should honor individual freedom and autonomy.
- Should assure services to the most needy.

More concretely, the Ethics Working Group created the following list of values and goals as a fairly comprehensive and accurate statement of what citizens have said is important to them about their health and the health care available to them, whether in the form of managed care, managed competition, single payer, fee-for-service, etc. While the order of priority remains open for discussion and debate, these goals can serve as important criteria for assessing the strengths and weaknesses of proposed policies and plans.

As you read the following list, consider these questions: What combination of these principles, or others, should guide how health care is organized and delivered in New Mexico? If we can not accomplish all our chosen goals, which ones should come first?
Universal Access: Every citizen and resident should have access to health care without financial or other barriers.

Comprehensive Benefits: Guaranteed benefits should meet the full range of health needs, including primary, preventive and specialized care.

Equality of Care: The system should avoid the creation of a tiered system and provide care based only on differences of need, not individual or group characteristics.

Fair Distribution of Costs: The health care system should spread the costs and burdens of care across the entire community, basing the level of contribution required of consumers on the ability to pay.

Intergenerational Justice: The health care system should respond to the unique needs of each stage of life, sharing benefits and burdens fairly across generations.

Personal Responsibility: Each individual and family should assume responsibility for protecting and promoting health and contributing to the cost of care. [Based on ability to contribute. See “Fair Distribution of Costs” above.]

Wise Allocation of Resources: Society should balance prudently what it spends on health care against other important priorities.

Effectiveness: The system should deliver care, as well as innovation that works and that patients want. It should encourage the discovery of better treatments. It should make it possible for the academic community and health care providers to exercise effectively their responsibility to evaluate and improve health care by providing resources for the systematic study of health care outcomes.

Quality: The system should deliver high quality care and provide individuals with the information necessary to make informed health care choices.

Effective Management: By encouraging simplification and continuous improvement, as well as making the system easier to use for patients and providers, the health care system should focus on care, rather than administration.

Professional Integrity and Responsibility: The health care system should treat the clinical judgments of professionals with respect and protect the integrity of the provider-patient relationship while ensuring that health providers have the resources to fulfill their responsibilities for the effective delivery of quality care.

Fair Procedures: To protect these values and principles, fair and open democratic procedures should underlie decisions concerning the operation of the health care system and the resolution of disputes that arise within it.

Local Responsibility: Working within the framework of overall reform, the health care system should allow local communities to design effective, high-quality systems of care that serve each of their citizens.
Many policy makers and citizens worry that, because resources are limited, we can not avoid certain tradeoffs between individual interests and needs on the one hand, and the interests of the population as a whole. How can this be done ethically and fairly?

The ethical framework that informs [such] rationing decisions must balance concerns for patient autonomy and justice, providing for the judicious and equitable use and distribution of resources. In such an arrangement, the requirements of the principles of autonomy and beneficence are legitimately constrained by the requirements of justice. Thus, coverage restrictions arrived at through rationing choices at the policy level constrain the exercise of individual autonomy on the part of patients, as well as the exercise of autonomy and beneficence on the part of providers. Doing so in an ethical way requires a procedurally fair and principled balancing of individual and population health care interests. (Gervais, 1999)

The Public Dialogue

How can we step back from the wars waged over details? How can we move beyond the ideological clashes that rely heavily on jargon that passes for clearly understood values and principles? How can we keep health care policy discussions focused on desired goals and not narrowly on unchallenged and competing mechanisms or systems?

We can do so by promoting civil discourse that highlights shared as well as conflicting interests, and by “growing the middle,” rather than pandering to extreme posturing. For example, there is nothing intrinsically holy or evil about for-profit managed care organizations, fee-for-service arrangements, a market-based approach to the design of health care financing, or single payer systems. They either do or do not serve ends that matter. As citizens, health care providers and public servants, we should be striving to improve New Mexicans’ health status and the health care delivery system, and not arguing incessantly about our differences, or promoting certain strategies over others independent of our stated goals and principles.

We should all pledge to explain what we mean by terms when we use them; we should demand honesty and candor from all parties (including ourselves) about what interests and values actually drive our decisions; and we must be willing to engage in respectful conversation and collaboration with all stakeholders.

Oregon Health Decisions and The Oregon Health Plan

One such effort took place, in the 1980s, in Oregon. “Confronted with the challenge of health reform, Oregon Health Decisions, a nonpartisan grassroots group, convened hundreds of community meetings throughout the 1980s to develop consensus on the basic values that citizens felt should shape reform. These were used to educate lawmakers, who then devel-
oped a reform process that included such meetings as an essential part of public deliberation on reforming Medicaid and extending coverage to the uninsured. The highly popular Oregon Plan resulted from these initiatives.” (Sirianni, 1999)

By 1991, using the recommendations of Oregon Health Decisions, an 11-member, government-appointed commission ranked 714 treatment/condition pairs, “using its own clinical judgment, taking into consideration the cost, effectiveness and social value of health services. By using this priority list, Oregon hopes to spend Medicaid funds in a more rational way and treat patients most likely to benefit from health care services…. Topping the proposed Medicaid priority list released February 20 [1991] were life-threatening but treatable conditions, maternity services and preventive care for children and adults. In the middle were chronic diseases where treatments are considered effective but do not return a person to full health, such as glaucoma, multiple sclerosis and cerebral palsy. Fatal conditions where treatment does not improve the person’s quality of life, as with terminal HIV disease and alcoholic cirrhosis of the liver, scored near the bottom.” (Lund, 1991)

It was then up to the Oregon legislature to ascertain how far down the list it can afford to go in any given budget year. Supporters point to the broad social input into the process. Opponents object to the target population: Medicaid recipients. These critics warn of certain aspects of the democratic, political process that might work to the disadvantage of ethnic or racial minorities, people with less common health conditions, or those who may be subject to moral disapproval. For example, in Oregon’s prioritization list, HIV and alcoholic cirrhosis, but not, apparently, cirrhosis of other etiologies, are at the bottom of the list.

### A Sampler of Dilemmas: Two Case Studies

Consider the following scenarios. They are composite/hypothetical cases used with health care professionals, administrators and students, to initiate a “values and decision making” dialogue. They are typical of the types of decisions that, currently, are being made on a regular basis and represent cases that cut across socioeconomic divisions. Which of the goals listed on page 112 are most important in resolving these issues? What specific “next steps” do they suggest? Who should “be at the table” when these issues are discussed?

#### Preemptive Exclusion

Rocky Mountain Health Plan is one of two health plans offered to employees of the local university. Employees may choose between the plans at the annual enrollment period. There is an employee, Mrs. Romero, who has Gaucher’s disease which, while not curable, can be managed with an expensive drug, Alglucerase. Depending on the dosage, the annual cost for the drug is $200,000-300,000. Mrs. Romero, age 52, is a widow with two adult children in their 20s. Within the current enrollment period she will exhaust her lifetime allowable coverage ($1,000,000) in her current plan (not Rocky Mountain Health Plan). That plan has just rewritten its policy so as to exclude her and cases like hers from now on. Rocky Mountain could rewrite its plan so as likewise to ex-
clude cases such as hers. As it stands, she is eligible to enroll in the Rocky Mountain Health Plan during open enrollment six months from now. Anticipating that she will, to cover these expenses, Rocky Mountain administrators and the university’s benefits office are considering increasing university employees’ annual premiums by $20 per month for the upcoming year, so as to maintain the financial status quo. Anticipated consequences include an increase in the number of lower-paid employees who decline coverage (Rocky Mountain has been the less expensive plan, so far), as well as Rocky Mountain Plan’s becoming more costly than the alternative (newly revised) plan.

At the university Mrs. Romero is a valued employee. She is the top grant writer for the School of Medicine, and her only hope of remaining insured is to keep her job. Clearly she will enroll in the Rocky Mountain Health Plan six months from now. How should the Plan proceed?

**Gainful Employment or Health Insurance: Take Your Pick**

Marilyn Thomas is a 27-year-old single mother of 3, a Medicaid recipient, and a TVI student who is part of the state’s Welfare to Work program. She will graduate from TVI at the end of this term and has been interviewed by several small companies for entry-level positions. She is a strong candidate for several of these jobs. None of them, however, comes with health care benefits. As a condition of her education support, she must become self-supporting. If/when she does become employed her income will render her ineligible for Medicaid support which includes health care benefits. She will then have to purchase health care insurance on her own, to continue these benefits for herself and her children. There is no way that her entry-level salary will even begin to cover the cost of insurance. What should she do? What should the state do?

**New Mexico: 1999 and Beyond**

What process should we establish, in 1999 and beyond, to continue the work started at the New Mexico First 1990 Health Care Town Hall? Should we undertake a state-wide discussion, as Oregon did? As we review the sampler of goals and values listed earlier in this chapter, are there areas where different groups can agree?

- Is universal access a widely accepted goal?
- Should access include access to a comprehensive set of benefits for everyone, or should the mandate cover only a basic benefits package?
- Should the cost of health care be distributed across society?
- Should solutions be local as well as statewide?
Perhaps we should start with the question: What is the overall goal of the health care delivery system in New Mexico? Health? Health care? Sickness amelioration? Maintaining healthy workers for our economic system? We need to have some idea of our desired destination before we decide the best route to travel.

**A Postscript on “Efficiency”**

It is common to invoke the value of “efficiency” when ranking alternative policies in terms of their social merit. Efficiency, economic or procedural, is meaningless separate from the goals it is intended to serve. Uwe Reinhardt offers the following “Illustration from Road Travel.”

*Suppose a family residing on the East Coast of the United States decides to visit “the West Coast.” The family has whittled down potential destinations on the West Coast to two cities: San Diego at the southern end of the State of California and Seattle at the northern end of the State of Washington. Family members who know about such things are charged with discovering, for each destination, the route that will “get the family there the fastest,” that being the explicit objective posed for the navigators.*

*Because the navigators had been expressly given the precise, narrow goal to find the route that will “get the family there as quickly as possible, we can safely call the route that does so “efficient,” but only, of course, relative to that specific, narrow goal…. Had the navigators been given the task of finding the route that can get the family to the destination as quickly as possible, but that also takes in at least three tourist attractions, the “most efficient” route might be somewhat different…. Evidently, then, in abstraction from a clearly specified objective, the term “efficiency” would have little policy relevance in this context.*

Comparing or ranking different health systems (for example Canadian and American), according to “economic efficiency” is impossible because of different social goals. “Canadians put a great value on an egalitarian distribution of health care, and their health system is structured to give expression to that ethical precept. Americans seem not to put that high a value on a strictly egalitarian distribution of health care, although it is hard to generalize on this point….Would the term “efficiency” actually have any meaning, in cross-national studies, in abstraction from the social goals posed for different national health systems?”

When we compare the relative merit of alternative public policies in terms of economic efficiency, such comparisons fail because these policies generally aim toward different social goals. Identifying and agreeing on health and health care delivery objectives is a **prerequisite** for determining the most “efficient” way to achieve them.
Sources:


Reinhardt, U. Lecture notes for Economics 102, Microeconomics. Supplied by Professor Robert Schwartz, University of New Mexico School of Law.


Chapter 7: RE-STRUCTURING HEALTH CARE: OUTCOMES AND OPTIONS?

SUMMARY

- Despite amazing technological advances and extended life expectancy for most Americans, the aggregate health of the whole population has not fared as well.

- Economic factors affect availability of care and access to service; 1 in 4 New Mexicans are uninsured and cite cost as the main reason for no coverage.

- Any restructuring of health care for New Mexico must include a balance between personal and public responsibilities.

- New Mexico has strengths as well as needs in the areas of access, cost and quality – the oft-stated goals of a health care system.

- Before solutions to the problems are posed, the most important step is to determine what outcomes are desired in a health care system.

- Outcomes can be either broad, large-scale goals (macro) or outcomes that are more specific to behaviors, diseases or services (micro).

- To break out of a narrow two-dimensional model for restructuring health care, a five dimensional model is proposed which allows greater flexibility in choosing options for a system.

- New Mexico has a health policy in statute. If we accept this policy, it is time to actualize this vision but we need to address 4 key challenges that lie in our path.

- There is a sense that people in the state are ready for action on health care.
In the previous chapters, we have described health status and determinants as well as key features and issues regarding health care delivery systems and financing. Next we outlined a number of special issues that impact the health care system in New Mexico. In the last chapter, we delved into the philosophy of health care and posed a number of key questions for consideration as we move forward in our efforts to construct a rational plan. As a participant in this New Mexico First Town Hall you are charged with determining what is our desired destination: What is a rational plan? Where do we want to go with this plan? What do we want health care to look like in New Mexico in 2009? Now it is time to think through these different elements of health care – financing, delivery, special needs – and start to consider our options. How do we put together a package that leads us to where we want to be? But first, let’s look at where we are today.

Today Americans have more advanced technology and advances in care than we could have dreamed possible 50 years ago. There have been several significant medical breakthroughs that have extended the life expectancy for most Americans. Indeed, the U.S. Centers for Disease Control and Prevention recently announced a 30-year gain in Americans’ life expectancy, which has occurred during the current century. The list of health care achievements we have seen is truly amazing:

- Technological advances have reduced risk for invasive surgery and a number of formerly dangerous diagnostic procedures have become non-invasive.
- Diagnostic tools are approaching the “Star Trek” level of sophistication with MRI, DNA mapping, and other computer-enhanced procedures becoming available in most areas of the nation.
- Telemedicine is increasingly bringing specialty care to rural health care sites and reducing critical response times to provide emergency care for hundreds of individuals each year.
- Immunizations are in place or being developed that will protect both children and adults from diseases that were catastrophic just years ago. Immunization efforts worldwide have eliminated smallpox. Incidence of polio and other vaccine-preventable diseases have plummeted as well.
- Orthopedic and rehabilitation specialists have joined forces with computer and chemical engineers to develop new products and electronics to assist disabled and injured individuals to re-enter careers and resume activities of daily living.
- Transplants and reattachment of limbs and organs maintain or extend life for thousands.
- Micro-engineering and genome research combine to create greater treatment efficacy for all but the most complex diseases.
Yet despite all of these miraculous scientific advances, the health of the public — the aggregate health of whole population — has not fared as well. While individual health outcomes have benefited from medical advances, the balance between the health of the community and the health of the individual remains tenuous. At a global level, when regional conflicts, famine, and economic downturn reduce the availability or affordability of even the most basic health care services, disease and death are close behind.

Economic factors effect the availability of care and access to services in the U.S. as well. Currently 43 million Americans are without health insurance and the majority of these people are employed. In New Mexico, 1 out of 4 residents have no insurance coverage and cite cost as the main reason why they are uninsured. Lack of health insurance has many consequences. Uninsured individuals use physician services less frequently and are less likely to get preventive care. Those uninsured in poor health are less likely to seek health care services and often are the major users of emergency and urgent care. Although insurance is not a panacea, it does help promote individual health — and by extension, population health — by affording more opportunity to receive health care. At a broader level, access to preventive care, safe environments, economic stability and healthy lifestyles promote not only the health of the individual but also promote the health of the community.

It is the health of the community that is often offered as the justification for public health initiatives such as immunizations, water, sanitation and food quality standards. Public concerns about issues such as DWI, smoking and substance use frequently spill over into areas outside of health care, such as public safety and the judiciary. Proposed solutions frequently involve influencing public policy. Once adopted, these policy changes eventually promote regulation and enforce safe standards across an entire population.

Over the past decade, public policy has been greatly influenced by personal and class litigation brought against a segment of the community or an industry perceived to be the root or cause of the poor personal health outcomes or increased public health risk. There are increasing examples where such public policy changes have impacted public health concerns. Reducing the numbers of persons driving while impaired/intoxicated (DWI) and the subsequent reduction in injury and death is attributed both to the increased enforcement of new and preexisting laws as well as reduction in social acceptance of DWI. Passage of local smoking ordinances and other policies, increased tobacco use prevention education, successful litigation and, unfortunately, reaching “critical mass” in the number of illnesses and deaths associated with tobacco use, all seem to have favorably influenced the public’s reduced demand for tobacco products and lower acceptance of tobacco use as a personal “freedom.”

The debate around personal choice and public health will only intensify in the future with the continued rationing of care and dwindling public resources. Increasingly, health plans are restricting coverage for certain services and conditions. The state of Oregon, with one of the more comprehensive public plans, continues to review care utilization data and pare down services covered under its plan. New Mexico’s sizable public health concerns, poor health outcomes and already limited access to primary and preventive care will undoubtedly
have a number of years where demands for secondary and tertiary care will tax the health care system. Intentional and unintentional injuries, the rural nature of the state and simple risk factors could continue to increase utilization of emergent and urgent care.

Any restructuring of health care for New Mexico in the 21st century must include a balance between personal and public responsibility for health and a healthy community. It cannot balance on either point alone. Individual responsibility and personal health behavior must be in equilibrium with the public’s health, economic sustainability of the health care system and of the people themselves, as well as long term economic goals. Such balance may not be achieved without the accompanying public policy of promoting and sustaining healthy communities. Health and community economic health are linked. Educational outcomes and nutrition are positively correlated. An effective, efficient, accessible and economically sustainable health care system will indeed be a system that reflects both personal and public responsibilities.

An Assessment Of Our Health Care System

In earlier chapters, we have described existing structures and outlined some concerns about the state’s health outcomes, delivery systems, financing and a variety of special issues. It is clear that New Mexico has strengths as well as needs in how we provide health care. As we start to assess what needs to be changed to make the current health care system work better, it makes sense to look more closely at these strengths and needs. Since access, cost and quality are considered by many to be the main goals of our health care delivery system, this section will look at the current system and reflect on it in terms of these three. The first two, access and cost, are the ones that most likely come to mind when considering the system. Quality, although more amorphous, subjective and harder to quantify, is also a very important component to analyze. Recent work has developed a better way to describe the elements of quality although there is still no accepted definition of what it is. Obviously all of the needs and strengths cannot be captured in this report, but this attempts to provide a sense of the range of opinion.

Access:

As noted earlier, “access” is defined differently by people. Despite the differing definitions, access remains an urgent concern for many New Mexicans. For most, at least one element of access means being able to get medical care when you need it at a price you can afford. In discussing this issue with numerous people, there is a general sense that too many people are getting too little care in the state. Here are some of the more specifically identified needs:

- Huge population of uninsured that is growing;
- Barriers to access in rural areas including transportation, lack of providers, language, geography;
- Non-financial barriers (paperwork, complexity, etc.);
• Cultural differences haven’t been addressed adequately to encourage people to want to access the health care system;

• Implementation of Medicaid Managed Care has exacerbated tensions between tribal governments and the state, creating additional distrust;

• Clinical preventive services are not widely available and are sometimes not covered benefits;

• Managed care has created difficulties and frustrations for many patients;

• Low reimbursement to providers for Medicaid and Medicare has caused some financial difficulties and may result in providers not being able to afford to take these patients;

• Changes resulting from managed care and other cost-savings efforts have reduced the ability to cost shift from commercial patients to cover Medicaid and Medicare patients as well as to provide charity care for the uninsured; and

• Lack of services, especially dental and mental health, are particularly acute in rural areas but are also concerns for other populations throughout the state.

Here are some of the strengths of our current system in terms of access:

• Increasing number of providers, especially primary care;

• A great deal of activity is underway to increase access throughout the state;

• Changes in scopes of practice and licensing have expanded pool of providers in some areas;

• Availability of very good resources (providers, facilities, research) in the state;

• New Mexico is generally healthy in terms of many chronic diseases – cardiovascular disease, cancer; and

• Children will have greater access to services as a result of the State Children’s Health Insurance Program and other efforts.

Cost:

The cost of health care has ripple effects throughout the state from institutions to individuals. It is an issue that concerns everyone from the business owner concerned about how to provide health insurance coverage to her employees, to the clinic administrator trying to figure out how to hire another nurse, to the minimum wage dishwasher at a restaurant wondering how to cope with the bills from his son’s hospitalization. Here are some identified needs in the area of health care costs:

• Costs, especially insurance premiums, are beginning to increase;
• As a result of premium increases and the trend of shifting a greater burden of costs on to the employee, more and more people who are offered insurance through their employers are declining coverage;

• U.S. still spends more on health care than any other developed country and the bill has now topped $1 trillion;

• High tech solutions (equipment, drugs, procedures) are driving up the cost of health care, especially since so many products and services are directly marketed to the consumer, resulting in increased demand;

• Many small employers still cannot provide affordable coverage to employees because the costs are prohibitively high;

• Most people don’t have to think about the true cost of health care because they don’t pay it directly because they are insured -- because of this disconnect between the payment and the service, there has been a tendency to overuse services, although with managed care, this is decreasing;

• Many people believe managed care has not controlled costs – they are simply being shifted elsewhere;

• Health care dollars are concentrated in the hands of few – insurance, pharmaceuticals, medical profession, although the government is the source of at least half of these dollars; and

• Clinical preventive services are frequently not reimbursed.

**Strengths** in the arena of health care costs include:

• Compared with earlier this decade, the rate of cost increases has slowed even as it begins to creep up again;

• Many believe managed care strategies are beginning to control costs;

• Given that there is a lot of money in the health care industry, funds are available to invest in new technology and other ways to improve health outcomes such as through community preventive services and child development; and

• More research is possible thanks to funds provided by both the private sector (insurance and pharmaceuticals) and government.

**Quality**

This measure of the health care system is a bit more difficult to define because the concept of “quality” is so subjective. Many people equate quality with a sense of being satisfied or feeling good about one’s care. Theorist Avedis Donabedian, a health care evaluation researcher, provided a more objective way to describe the elements of quality health care, although even he did not define what was meant by the term “quality health care.” He
developed a three-dimensional cube model that consists of the following: 1) the aspects of health (physical-psychological function, psychological function and social function), 2) the subjects of care (patient and person), and 3) the providers of care (individual practitioner, several practitioners, organized team, and institutional providers). According to this model, quality must be evaluated along all three axes and represents the sum of three parts: structure, process and outcome. (Burns & Grove, 1997)

In New Mexico some **needs and concerns** associated with quality are as follows:

- Need an operational definition of “quality” that people can understand and agree on, and then establish a common benchmark of quality health care;
- Current dissatisfaction on the part of physicians in the managed care setting regarding autonomy, reimbursement and inefficiencies;
- Dissatisfaction on the part of institutions regarding current fee schedules and other payment methods;
- Some people are very dissatisfied with their health care. Research shows that people with chronic illnesses are less satisfied with their care than are healthier people;
- Many people have concerns about their managed care plan’s emphasis on cost control. According to a April 1999 Kaiser Family Foundation nation poll, 72% of people in “strict” managed care plans say they were worried that “If [they] became sick, their health plan would be more concerned about saving money than providing the best treatment;”
- Greater standardization of procedures at times can be rigid and not respond to variation in patient needs and differences;
- Greater reliance on groups of providers practicing in teams can create confusion on the part of the patient about which provider to contact; and
- Team practices can lead to confusion and frustration on the part of providers because of lack of interdisciplinary coordination and lack of feeling individually valued.

**Strengths** in the area of quality include:

- People typically feel that they are getting quality health care. According to a recent survey by the Employee Benefit Research Institute, 52% of Americans believe that health care in the U.S. is excellent to good. (EBRI, 1998) In New Mexico, a vast majority of respondents participating in the Consumer Assessment of Health Plans Survey in 1998, indicated that they were satisfied with their managed care health plans (HPC, 1998) although the recent satisfaction survey done by the National Committee for Quality Assurance (NCQA) indicated that the state’s plans performed below the national average;
Systems are in place for assessing quality of some elements of health care delivery systems [i.e. Health Plan Employment Data Information Set (HEDIS), Joint Commission on Accreditation of Healthcare Organizations (JCAHO), etc.];

Reliance on health care provider teams provides more people and more skills for patient care;

Greater standardization and protocols can ensure more consistent treatment; and

Evidence-based practice guidelines issued by the Agency for Health Care Policy and Research may help to ensure greater efficacy in treatment.

Outcomes

Before solutions are posed and systems are developed, the most important step to determine is what outcomes are desired in a health care system. Without the outcomes in mind, it is like traveling without knowing where you want to go. Generally speaking, outcomes can be one of two basic levels: macro-level outcomes or micro-level.

Macro-level outcomes refer to broad, large-scale goals such as improving health status through economic development and job opportunities or providing universal health care access for all New Mexicans. Another example of macro level outcomes can be found in Healthy People 2000. This national prevention initiative is built around a framework of three broad goals: 1) increase the span of healthy life for Americans; 2) reduce health disparities among Americans, and 3) achieve access to preventive services for all Americans.

At the macro-level, actions can impact the broader social determinants of health. Poverty and socioeconomic status are the most significant of these determinants but they also include education, environment, behavior and health care services. Experts suggest that there are three key strategies that can impact health outcomes:

- Promoting economic development and job opportunities, especially in disadvantaged communities.
- Improving the health status of children through extensive support as they develop. Two interventions that have been shown to be effective at improving children’s health are home visitation and preschool. These interventions, in turn, result in healthier adults.
- Improving education at all levels including specific education to improve health behaviors and to increase understanding how to access health services.

Micro-level outcomes are more specific to behaviors, diseases or services. These types of outcomes can be best illustrated by the objectives developed for Healthy People 2000. Organized under the broad approaches of health promotion, health protection, and preventive services, the more than 300 national objectives are organized in 22 priority areas. For example, in the priority area of unintentional injuries, a health status objective is to reduce deaths.
caused by unintentional injuries to no more than 29.3 per 100,000 people. These outcomes are measured annually to determine how well the Nation is performing against these goals. Although not as expansive a list, the Public Health Division (PHD) is focusing on three key outcomes for its work over the next few years: 1) children’s health, 2) disability and chronic disease, and 3) substance abuse. These three areas will serve as the core for all efforts that PHD will undertake and they have established measures to track their progress toward these outcomes.

Outcomes for health need not always be at the national or state level. Communities can and should choose their own goals and priorities. The choices that communities make may be based on the same types of drivers for decisions made at other levels: concerns of the residents (“We need a clinic in this village”) or crisis driven (“The community hospital is going bankrupt and a quick infusion of cash is needed”) or they may be more systematic and data driven (“As a result of a study we found that our town’s rate of teen pregnancy is the highest in the state”).

In short, establishing outcomes as well as appropriate measures for tracking progress, are critical to developing a rational system – a system that reflects the desires of society and its values. Some of the outcomes-related questions that should be considered include:

- What is it that we want in terms of health for the state? What are our goals for New Mexico’s health care system? What are the supporting principles behind these goals? What are the steps necessary to achieve these goals? In what order should we arrange our goals if we can’t do it all?

- What do we believe the role of socioeconomic status is in health? Do we affirm the research? Do we want to take steps to improve poverty, economic inequities, economic development and the other determinants of health?

- How do we design appropriate measures for our outcomes? How will we know we are measuring the right things?

**Looking At Options -- How To Begin To Solve The Problems**

In posing solutions to our current health care crisis, many people get caught in a debate between the two most discussed options -- managed care and single payer systems. Endless energy is spent defending one method over the other. Personal positions become lines drawn in the sand and productive discussion is no longer possible. This is a false dichotomy because these two systems describe different things. Single payer is a financing mechanism and managed care is a delivery system. Perhaps once this distinction is made clear then a more reasonable debate can take place on the topic.

The following section describes both financing and delivery systems and delineates their principles and core strategies. Following this description is a model that shows a continuum in which elements from each of these systems can be selected.
The chart that follows on page 128 outlines some of the features of a few reform options. Our current multiple payer approach is contrasted with four other potential options. These options present a range of financing strategies, but clearly are not all of the options for consideration. They are intended to prompt thought about how financing, the role of government and insurers, consumer coverage, and impact on providers can play out along these different elements.
<table>
<thead>
<tr>
<th>Brief description of approach</th>
<th>Current Multi-payer approach</th>
<th>Medical Savings Accounts (MSA)</th>
<th>Market reforms or tax incentives only</th>
<th>“Pay or Play”</th>
<th>Single Payer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some people are covered through private insurance, some public, some not at all. Financed largely by government and employer-sponsored plans primarily through premiums and taxes</td>
<td>Alternative form of insurance combining high-deductible coverage with a savings account for medical expenses</td>
<td>Existing health insurance market would be reformed. Uninsured would receive coverage through tax credits, vouchers, or expansion of Medicaid. Would be financed as presently.</td>
<td>Employers would offer coverage (i.e. “play”) or pay special tax to help government program (i.e. “pay”). Uninsured could obtain coverage from this expanded public sector program</td>
<td>All persons covered by a publicly sponsored health plan. Potentially financed by taxes, premiums based on a sliding scale or by pooling existing health care dollars.</td>
<td></td>
</tr>
</tbody>
</table>

| Role of government | Government sets some standards and is involved as a significant funder of programs | In 1996 Congress enacted legislation for a trial period for MSA through 12/31/01. Medicare beneficiaries have option beginning in 1999 | Few changes from today. Federal government would set standards for program purchased with tax credits. IRS would be involved. | Federal government would set standards for employer plans. HHS and/or the states might administer government plan. | Federal or state government or a public commission could administer; could also be administered by contracted insurer. |

| Consumer coverage/ Benefits | 1 in 4 not covered and benefits depend on terms of policy | May provide coverage to many already-insured persons and offer high-deductible coverage | Some plans would offer only basic benefits. | Some plans would mandate only basic benefits. | Goal of universal coverage, choice of provider and comprehensive benefits. |

| Approaches to cost containment | Relies on market competition; managed care approaches implemented to reduce cost in many plans | Reduce premium costs but savings may be depleted in years with high expenses | Some plans decrease employer/employee tax subsidies to increase cost consciousness. Some support managed care models. | Some plans involve price controls and regional expenditure targets. Some plans strongly promote managed-care models. | Fixed budgets and negotiated provider fees. Could also use some method of capitation for payment. |

| Role of private insurers | Central role although government provides majority of coverage today | Private insurers and banks are currently offering these plans | Possibly increased role, as more people are able to purchase private policies. | Similar to today within a large employer market. Small-group or individual markets could change drastically. | Industry would have a different role such as serving as the contracted insurer or selling supplemental policies. |

| Impact on providers | Providers have to interact with multiple entities with varying requirements | Few changes; Patients may not chose to see provider except in emergency | Few changes from today. Possibly increases in managed care programs. | Probably increased price controls. Possibly increases in managed care program | Would maintain private practice and interact with single entity only |

Sources: Stoline & Weiner, (p. 241), National Coalition for Health Care (1998) and Consumers Union
The chart below describes, in a similar way as the reform options chart, how three different delivery system approaches compare. Here again, these are not the only systems or methods for delivering care but they are examples of types that are familiar. The term “access management” refers to whether a patient can choose freely how she/he enters the system (i.e. pick whatever provider s/he wants – specialist or generalist) or if the access to the delivery system is more controlled or managed by the insurer such as in a managed care plan like an HMO or PPO.

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**Selected Health care Delivery and Access Management Systems**

<table>
<thead>
<tr>
<th>Parties</th>
<th>Alternative Plans</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MANAGED</td>
<td>OPEN</td>
<td>Indemnity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HMOs</td>
<td>PPOs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subscribers</td>
<td>• Restricted choice</td>
<td>• Choice from panel</td>
<td>• Free choice</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Generous benefits</td>
<td>• Co-pays</td>
<td>• Deductible and 80/20 co-pay</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Primary care provider serves as “gatekeeper” / coordinator</td>
<td>• Out of network with reduced benefits and higher cost</td>
<td>• Major medical benefits</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Broader benefits</td>
<td>• Broader benefits</td>
<td>• Limited outpatient coverage</td>
<td></td>
</tr>
<tr>
<td>Physicians</td>
<td>• Limited access</td>
<td>• Access by contracting</td>
<td>• All participate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Discounted reimbursement or capitation</td>
<td>• Discounted charges or fee-schedule</td>
<td>• Paid charges</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Utilization review (UR) requirements</td>
<td>• UR – mostly hospital-based</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospitals</td>
<td>• Limited access</td>
<td>• Limited access</td>
<td>• All participate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Discounted charges, per diem, case rates or capitation</td>
<td>• Discounted charges or per diem</td>
<td>• Paid charges</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• UR</td>
<td>• UR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employers</td>
<td>• Reduced cost</td>
<td>• Reduced cost</td>
<td>• Expensive but most freedom for employees</td>
<td></td>
</tr>
</tbody>
</table>

Source: Cleverly, p. 53
The previous two charts described two of the most commonly considered elements of the health care system – financing and delivery. However, to conceptualize a way to see how pieces of the health care system can be put together in more ways than what is possible in a two dimensions, we propose viewing health care as consisting of five primary elements: payer approach, delivery and access management, payment method, covered population, and benefit level.

- **Payer approach** basically refers to how many payers are there to be – should there be multiple payers, as our current system provides or should there be a unified payer that pools funds and serves as the administrative entity. Even within this bifurcated approach, there can be gradations of payers. For example, in a multi-payer system there could be private insurance as it currently exists with multiple companies providing various options and plans while for publicly funded insurance (Medicaid, Medicare, employee and retiree plans), these funds could be pooled and administered singly. This could be funded by premiums, individual taxes, employer taxes, or excise taxes, to suggest a few options.

- **Delivery and access management** is a slightly different way of looking at the health care delivery system. This element approaches delivery from the angle of access: How does a person get into the delivery system -- is it open access or is it controlled access? Open access is best illustrated by indemnity plans, which allow free choice among providers and usually places responsibility for coordination of care on the patient. Controlled, or managed, access can be seen in the variety of managed care plans that exist (PPO, POS, Staff Model HMO, Network HMO, etc.) which typically place the coordination of care burden on the primary care provider.

- **Payment method** describes how the provider is paid – is it fee-for-service? Capitated? All providers salaried?

- **Covered population** refers to how many people are covered by a system – is it universal or limited based upon certain restrictions such as ability to purchase insurance (individually, through an employer or some other purchasing mechanism).

- **Benefit level** describes what types of benefits are provided – are they comprehensive, limited or only catastrophic? Do they include dental? Preventive care? Mental health? Vision? Are these benefits universally applied or are they provided based on the ability to pay? Can a person “buy up” additional benefits?

In addition to these 5 elements are the overarching regulations and laws that govern the health care system. These requirements include regulations on how insurance plans operate, mandated benefits or other requirements by government. Examples include regulations that require health plans to pay for essential emergency room care, required coverage of certain examinations or tests such as Pap tests or screening mammograms, and required lengths of stay for childbirth or mastectomy.
These elements can be put together in a number of ways -- mixed and matched – to develop a health care system that works for a given population. It’s a lot like the “one from Column A, 2 from Column B…” approach to designing a system. Here are a few examples of potential hybrids:

- Multiple-payer, managed access, fee-for-service, universal coverage for limited benefits;
- Single-payer, managed-access, capitated, universal coverage for comprehensive benefits;
- Multi-payer with a single payer for public funds, open access, fee-for-service, limited coverage, limited benefits with individual option to buy up to comprehensive benefits; and
- Single payer, open access, fee-for-service, universal coverage, limited benefits with no option to buy up.

The following graph illustrates how all of these pieces come together to create a system:

Now that you have devised a system to deliver health care, there are other considerations and decisions that need to be made. Some questions that may need to be considered include:

- How is eligibility determined?
- How are individuals enrolled?
- How are providers selected to participate?
- Should services be integrated and, if so, how?
- Should there be public/private partnerships?
- How can providers (including health care delivery systems, practitioners, insurers) be accountable to the community and the people that it serves?
• How can communities get involved in the system? Through health councils? Community coalitions? Can communities develop their own outcomes? How to ensure community ownership of the system? How to ensure collaboration?

• How to engage patients in a proactive relationship? How to encourage individual responsibility for one’s health?

• To what extent should personal responsibility for one’s own health outcomes be a part of the care model?

• How to ensure that the system pays for health instead of only illness? What is the best way to integrate prevention into the model?

• Should there be a goal of basic health care coverage package? What should it look like? What should it cost?

• Should there be a goal of universal access and universal coverage? What does this mean? How can we assure it?

• If we establish a goal of universal access then what actions should be taken on financing? Delivery?

• How do we design a system that is flexible enough to respond to changes at the national level as well as in adjoining states?

CONCLUSION

“It is the policy of the state of New Mexico to promote optimal health; to prevent disease, disability, and premature death; to improve the quality of life; and to assure that basic health services are available, accessible, acceptable and culturally appropriate, regardless of financial status.”

9-7-11.1.D, NMSA 1978

As cited above, New Mexico has had a health policy for nearly 20 years. This statute clearly spells out what the State’s policy is toward health. Given that the policy is so clearly stated, it seems reasonable that our objective should be to actualize this vision. If we accept this vision, then our task is clear.

There are four important dilemmas or challenges that face us that must be considered by this group as well as by the state as a whole if we are serious about improving our state of health:

• What is it we want in terms of health for the state? What are our goals for New Mexico’s health care system? How can we agree to arrange our goals if we can’t do it all?
- How do we get beyond bickering about issues such as single payer versus managed care and move on toward productive dialogue and solutions that might help us improve our health status?

- How can we create a system that provides health services to all New Mexicans, as is stated by statute? How do we define “basic health services” to speak the spirit and not just the letter of the law?

- How can we create a health system that interacts with other systems such as economic development agencies and education to address the determinants of health and the prevention of disease?

Designing a health care system that values health, seeks to remedy the problems that have been expressed, and capitalizes on the strengths that exist within the state, will be a difficult task. In the background interviews conducted in preparation for this report, one message was heard repeatedly: “New Mexico is ready to do something about health care – the time is now.” Let’s not delay.
Sources:


**GLOSSARY**

**Age-adjusted death rate:** The rate of death in a population, gathered from measures (i.e. breast cancer deaths, lung cancer deaths, etc.) in a population that have been recomputed using a standard profile (e.g. age distribution); this statistical modification eliminates the effect of different age distributions in the different populations so that comparisons in rates can be made.

**Capitation:** Method of payment for health services in which a physician or hospital is paid a fixed amount for each person served regardless of the actual number or nature of services provided.

**Certificate of need (CON) program:** A program that is coordinated by state planning agencies that requires health care facilities to obtain approval before they make major investments in equipment or services including adding hospital beds or construction. Approval is based on community need and existing services. Federal requirements for CONs were dropped in 1986. (Stoline, 1993, p. 96 & 266)

**Determinants:** An antecedent that contributes to change in health status. (Fairbanks & Wiese, 1998, p. 143)

**Ecologic determinants model:** Model that integrates six different factors that contribute to health: economic factors, social and physical factors, health system access, cultural risk factors, family risk factors, and individual risk factors.

**Fee-for-service:** The medical provider will be paid a fee for each service rendered to the patient. Under this type of coverage the patient is seen by a provider of his/her choice, the insurance claim is filed by either the patient or the provider. (Health Insurance Association of America, 1998, p. 13)

**Health:** (a) A state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity (World Health Organization & United Nations Children’s Fund, 1978); b) The extent to which an individual or a group is able to realize aspirations and satisfy needs, and to change or cope with the environment. Health is a resource for everyday life, not the objective of living; it is a positive concept, emphasizing social and personal resources as well as physical capabilities (WHO, 1986, p. 426); c) A state characterized by anatomic, physiologic and psychological integrity; ability to perform personally valued family, work, and community roles; ability to deal with physical, biologic, psychological, and social stress; a feeling of well-being; and freedom from the risk of disease and untimely death (Stokes, Noren, & Shindell, 1982). [In Fairbanks & Wiese, 1998, p. 144]

**Health maintenance organization (HMO):** Organization that provides for a wide range of comprehensive health care services for a specified group at a fixed periodic payment; a type of managed care organization; a system that assumes or shares both the financial risks and delivery risks associated with providing medical services to a voluntarily enrolled population in a particular geographic area, usually in return for a fixed, prepaid fee.
**Health Professional Shortage Area (HPSA):** This is a designation given by the Bureau of Primary Care of the Health Resources and Services Administration to areas that meet certain criteria established by the U.S. Department of Health and Human Services including 1) urban and rural geographic areas, 2) population groups, and 3) facilities with shortages of health professionals. These designations are updated annually.

**Horizontally integrated health care organization:** An arrangement by which a corporation (either for-profit or nonprofit) operates or coordinates a number of health care facilities providing the same level of service (e.g., a chain of hospitals or nursing homes)

**Indemnity policy:** Covers benefits to be paid in a predetermined amount in the event of a covered loss.

**Locum tenens program:** Program that provides coverage for practitioners, especially in rural areas, that want relief from their practices for training, vacation, family need, etc.

**Managed care:** Health care delivery systems that integrate the financing and delivery of appropriate health care services to covered individuals by means of arrangements with selected providers to furnish a comprehensive set of health care services to members; explicit criteria for the selection of health care providers; formal programs for ongoing quality assurance and utilization review; and significant financial incentives for members to use providers and procedures associated with the plan; a termed often used generically for all types of “alternative delivery systems”(ADS) (i.e. HMO, PPO, POS), implying that they “manage” the care that is received by consumers; the contrast is with traditional fee-for-service care, which is unmanaged. The term is also used to describe a range of utilization controls that are applied to “manage” the practices of physicians and other providers, regardless of whether they are in an ADS.

**Medically Underserved Area:** These areas are determined by the New Mexico Department of Health and meet certain criteria: infant mortality rate; ratio of primary care physicians to the general population; percentage of population age 65 and over; percentage of the population earning income below 100% of the federal poverty level; and other factors.

**Per diem:** Payment that is based on a daily rate; usually refers to in-patient care.

**Point-of-service:** A health plan option that allows members to choose at the time medical services are needed whether they will go to a provider within the plan’s network or seek medical care outside the network.

**Population health:** The aggregate health outcome of health adjusted life expectancy (quantity and quality) of a group of individuals, in an economic framework that balances the relative marginal return from the multiple determinants of health.

**Prevention:** Any strategy or activity designed to prevent disease or adverse health condition. Primary prevention is action taken to reduce incidence or risk of occurrence of disease. Secondary prevention is the screening and detection of disease in an early, presymptomatic state to intervene, when prognosis is favorable. Tertiary prevention is intervention after disease has become manifest to reduce risk of recurrence or complication.
**Preferred provider organization:** A health care benefit arrangement designed to supply services at a discounted cost by providing incentives for members to use designated health care providers (who contract with the PPO at a discount), but which also provides coverage for services rendered by providers who are not part of the PPO network at a higher cost for the patient.

**Primary care provider (PCP):** A physician or other medical professional who serves as a member of a managed care organization’s first contact with a plan’s health care system. This provider coordinates the care for a patient and provides referral for the patient to see specialists or receive other services.

**Reasonable and customary charge:** Amounts charged by health care providers that are consistent with charges from similar providers for identical or similar services in a given locale.

**Risk factor:** Anything that is directly or indirectly related to increased risk; an aspect of personal behavior or lifestyle, socioeconomic determinant, an environmental exposure, or an inborn or inherited characteristic that is associated with an increased occurrence of disease or other health-related event or condition.

**Salary:** Payment made at regular intervals for services; payments are not linked with the number of patients seen or procedures completed.

**Statistically significant:** A measured difference may be statistically significant if the likelihood of its being due to chance (p value) is very low.

**Surveillance:** The systematic collection, analysis, interpretation, and dissemination of health data on an ongoing basis, to gain knowledge of the pattern of disease occurrence and potential in a community, in order to control and prevent disease in a community.

**Vertically integrated health care organization:** An arrangement by which a corporation (either for-profit or nonprofit) operates or coordinates a group of facilities that collectively offer many levels of health care service; usually provides or arranges for the delivery of primary care, specialized ambulatory care, hospital care, and long term care. HMOs can be viewed as a type of vertically integrated organization.