Developing New Mexico Health Care Policy
An Application of the Vital Issues Process

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Developing New Mexico Health Care Policy
An Application of the Vital Issues Process

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Abstract
The Vital Issues Process, developed by the Sandia National Laboratories Strategic Technologies Department, was utilized by the Health Care Task Force Advisory Group to apply structure to their policy deliberations. By convening three expert panels, an overarching goal for the New Mexico health care system, seven desired outcomes, nine policy options, and 17 action items were developed for the New Mexico health care system. Three broadly stated evaluation criteria were articulated and used to produce relative rankings of the desired outcomes and policy options for preventive care and information systems. Reports summarizing the policy deliberations were submitted for consideration by the Health Care Task Force, a Joint Interim Committee of the New Mexico Legislature, charged with facilitating the development and implementation of a comprehensive health care delivery system for New Mexico. The Task Force reported its findings and recommendations to the Second Session of the 41st New Mexico State Legislature in January 1994.
Acknowledgments

The members of the Health Care Task Force Advisory Group deserve special thanks for generously contributing their time on weekends to participate in the Vital Issues panels and to review and comment on the text of the panel reports. Without their contributions, as well as those of representatives from the New Mexico Department of Human Services, the New Mexico Department of Health, and the New Mexico Health Policy Commission, this project would not have been possible. Frank Martinez, Advisory Group Coordinator, and Tex Ritterbush, Group Leader of the Policy/Information Working Group, were instrumental in the decision to employ the Vital Issues Process as a strategic planning tool to facilitate the deliberations of the Advisory Group. Their willingness to champion the Vital Issues Process, even when facing challenging deadlines, allowed the procedure to gain the confidence of occasional skeptics. Jessica Glicken of the Strategic Technologies Department at Sandia National Laboratories and Kate Johnson of Tech Reps, Inc. served as rapporteurs at two of the panels. Their detailed and accurate records of the panel discussions were invaluable in preparing panel reports.
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Introduction

In 1993, the New Mexico Legislature created the Health Care Task Force, a bipartisan committee consisting of six members each from the House of Representatives and the Senate; four public members, including two representing the business community, one each from small and large employers, an attorney with expertise in health care, and a health care reform advocate; four ex-officio members from the executive branch including the Secretary of Human Services, the Secretary of Health, a representative of HPC appointed by the governor, and the Superintendent of Insurance; and seven additional advisory members selected from the New Mexico Legislature. The Task Force was charged to facilitate the development and implementation of a comprehensive health care delivery system for New Mexico and to report its findings and recommendations on access, availability, quality, and cost issues to the full Legislature during the January 1994 Legislative Session.

Health Care Task Force Advisory Group

A Health Care Task Force Advisory Group comprised of 50 informed and interested citizens was appointed in mid-1993 by the Speaker of the House of Representatives and the President Pro Tem of the Senate to provide input and advice to the Task Force. In order to effectively meet its charge, the Advisory Group was divided into three working groups each focusing on an important topic of concern: (1) policy and information; (2) programs and education, and (3) finance and insurance. Recognition of the lack of consistent direction for programmatic policy and resource allocation in the New Mexico health care delivery system led the Advisory Group to initially focus on generating a comprehensive set of desired outcomes for the system to guide the health care reform process.

Role of the Vital Issues Process

A strategic planning tool, known as the Vital Issues Process developed by the Strategic Technologies Department at Sandia National Laboratories, was employed to assist the Advisory Group in first articulating and then prioritizing a condensed set of desired outcomes for the New
Mexico health care system. This process is designed to identify and rank a portfolio of programmatic activities for an organization aimed at satisfying its high-level goals and objectives. A series of intensive, facilitated workshops each building on the results of the previous ones are convened. The first articulates working definitions, identifies target goals and objectives, describes issues of concern, and establishes criteria for issue selection. A second workshop employs the selection criteria and the working definitions to identify and rank a set of issues. Finally, individual sequential workshops are convened to identify and rank programmatic activities associated with the identified issues, usually, but not necessarily, beginning with the highest ranked issue.

Successful application of the Vital Issues Process requires extensive stakeholder participation, thereby predisposing acceptance of the programmatic endeavors by those stakeholder communities. Minor modifications were made to the standard process to better meet the immediate needs and schedule of the Advisory Group.

Desired Outcomes for the New Mexico Health Care System

An overarching goal for the New Mexico health care system, three evaluation criteria for ranking desired outcomes, and a coalesced set of seven desired outcomes were developed from an extensive set of 36 desired outcomes initially generated by the Advisory Group. This work was performed by a panel assembled from the membership of the Policy/Information Working Group (see Appendix A).

The overarching goal for the New Mexico health care system was determined to be:

To provide affordable health care with reasonable access and quality to all New Mexicans.

Seven desired outcomes for the New Mexico health care system were delineated by the panel by merging and refining the desired outcomes developed originally by the three working groups as follows:

Improved health for all New Mexicans [Improved Health].

Appropriate preventive care based on community education for wellness, with complete information and promotion of individual responsibility [Preventive Care].
Economically viable and efficient health care delivery resulting in financial equity for all stakeholders with implementation of cost containment measures [Economics].

Quality health care that is sensitive to the psychosocial, economic, and cultural background of patients and is provided within a reasonable commuting distance, with a minimum of administrative barriers [Quality].

Efficient, technologically current, user-friendly management information and data collection system in order to improve the health policy and decision-making capacity of public and private organizations and individuals [Policy].

High quality and responsible public and private health care providers and institutions for medical education who participate in the design of and are accountable for changes in the health care system [Providers].

Maximum freedom of choice for quality physical and mental health coverage through multiple health care delivery systems [Choice].

Ranking of Desired Outcomes

The Vital Issues Process employs a paired-comparison procedure requiring individual members of the panel to privately assess the relative importance of each desired outcome according to a single criterion compared to each of the other desired outcomes for that same criterion. This process is repeated until paired comparisons are made in a similar manner for all criteria. To translate these assessments into quantitative scores, the following numerical scale is used: much more important = 5; more important = 4; equally important = 3; less important = 2; and much less important = 1.

Prior to scoring individual desired outcomes, one member of the panel champions or markets the desired outcome to the remainder of the panel in the context of the evaluation criteria. A second member of the panel is assigned the role of making counterpoints to this presentation. This exchange is followed by a discussion and further elaboration of any related issues by the complete panel. A set of special scoring sheets is provided to facilitate the recording of numerical scores for subsequent analysis. In this manner, a relative ranking of the desired outcomes, along with average numerical scores assigned to each desired outcome and a measure of the disagreement among panelists with respect to the average score, are obtained simultaneously.
Evaluation Criteria

Three evaluation criteria developed by the panel were used for making paired comparisons, namely:

* Reasonable access — opportunity for all New Mexicans to obtain basic health care services.

* Affordable — cost of health services must be reasonable in the aggregate as a component of the economy and the impact must be equitably shared by all stakeholders.

* Quality — effective and efficient use of health care technologies and services to advance overall wellness, including outcome research, benchmarking standards of care, and measurement protocols.

Numerical Results

The quantitative analysis of the paired comparisons performed by each member of the panel produced the following ranking of the seven desired outcomes, in descending order, according to the criterion of reasonable access:

- preventive care;
- quality health care (tie);
- health policy (tie);
- health care providers;
- improved health for New Mexicans;
- economic viability and financial equity; and
- freedom of choice.

When judged by the affordable criterion, the relative ranking of the desired outcomes assigned by the members of the panel is, in descending order:

- preventive care;
- economic viability and financial equity;
- health policy (tie);
- quality health care (tie);
- health care providers;
• freedom of choice; and
• improved health for New Mexicans.

For the quality criterion, the members of the panel ranked the desired outcomes in descending order as follows:

• preventive care;
• health policy;
• health care providers;
• quality health care;
• improved health for New Mexicans;
• economic viability and financial equity; and
• freedom of choice.

A graphical summary of the quantitative results for the reasonable access criterion compared to the quantitative results for the affordable criterion is shown in Figure 1. Desired outcomes plotted upward and to the right are judged to be the most important (e.g., preventive care received the highest average score among the members of the panel of 3.3 for the reasonable access criterion as well as the highest average score of 3.4 for the affordable criterion in Figure 1). Disagreement among the members of the panel on the affordable criterion is illustrated by the horizontal width of the ellipse signifying a given desired outcome, while disagreement among the members of the panel on the reasonable access criterion is shown by the vertical height of the ellipse. Greater disagreement corresponds to longer distances (e.g., the greatest disagreement on the importance of a desired outcome for both the reasonable access and affordable criteria occurred for freedom of choice as is evident in Figure 1).

Figure 2 compares the quantitative results for the reasonable access and quality criteria. Preventive care received the highest average score on both of these criteria. Again, freedom of choice had the highest disagreement among members of the panel on the quality criterion (see Figure 2).
Figure 1. Summary of the numerical ranking of desired outcomes for the New Mexico health care system according to the reasonable access and affordable criteria. For any desired outcome, the length of the horizontal axis of the ellipse represents the standard deviation of the scores assigned by the individual members of the panel on the affordable criterion, while the length of the vertical axis of the ellipse corresponds to one standard deviation of the scores assigned by the individual members of the panel on the reasonable access criterion.

A comparison of the quantitative results for the rankings under the affordable and quality criteria is given in Figure 3. Interestingly, when evaluated by each of the three criteria, freedom of choice exhibited the greatest disagreement among members of the panel (compare Figures 1, 2, and 3).

**Development of Health Care Policy Options and Action Items**

Two subsequent Vital Issues panels were held to develop policy options for the desired outcomes of preventive care, the highest ranked desired outcome, and information systems. Information systems appeared among the highest ranked desired outcomes on each of the three evaluation criteria and was particularly well-matched with the focus of the Policy/Information
Figure 2. Summary of the numerical ranking of desired outcomes for the New Mexico health care system according to the reasonable access and quality criteria. For any desired outcome, the length of the horizontal axis of the ellipse represents the standard deviation of the scores assigned by the individual members of the panel on the quality criterion, while the length of the vertical axis of the ellipse corresponds to one standard deviation of the scores assigned by the individual members of the panel on the reasonable access criterion.

Working Group. Additional identified stakeholders, including representatives from the New Mexico Department of Human Services, the New Mexico Department of Health, and HPC, participated in these panels.

**Preventive Care**

Four preventive care policy options were determined by the second Vital Issues panel (see Appendix B) to be necessary for any New Mexico health care system. These options are:

*Create financial and other incentives for health care providers, payers, employers, and consumers to encourage widespread disease prevention, health promotion, and early intervention [Incentives].*

*Establish and deliver collaborative, integrated, population-sensitive educational programs to improve access to health care delivery, emphasize the importance of prevention, promote healthy lifestyles, and foster realistic outcome expectations [Education].*
Figure 3. Summary of the numerical ranking of desired outcomes for the New Mexico health care system according to the affordable and quality criteria. For any desired outcome, the length of the horizontal axis of the ellipse represents the standard deviation of the scores assigned by the individual members of the panel on the quality criterion, while the length of the vertical axis of the ellipse corresponds to one standard deviation of the scores assigned by the individual members of the panel on the affordable criterion.

Establish and support collaborative, integrated, population-sensitive community-based health care centers as the focus for delivering primary care, health promotion, and disease prevention [Community-Based Health Care Centers].

Conduct needs assessments to determine the mix of providers and programs that is necessary for appropriate and comprehensive prevention and promotion and provide programs for recruiting and retaining professional providers [Needs Assessments].

The quantitative analysis of the paired comparisons performed by each panelist produced the following ranking of the four policy options, in descending order, according to the criterion of reasonable access:

- community-based health care centers;
- needs assessments;
- education; and
- incentives.
When judged by the affordable criterion, the relative ranking of the policy options assigned by the members of the panel is, in descending order:

- incentives;
- community-based health care centers;
- needs assessments; and
- education.

For the quality criterion, the panel ranked the policy options in descending order as follows:

- education;
- needs assessments (tie);
- community-based health care centers (tie); and
- incentives.

A graphical summary of the quantitative results for the reasonable access criterion compared to the quantitative results for the affordable criterion is shown in Figure 4. Policy options plotted upward and to the right are judged to be the most important (e.g., community-based health care centers received the highest average score form the panelists of 3.6 for the reasonable access criterion, while the highest average score of 3.6 on the affordable criterion was assigned to incentives in Figure 4). Disagreement among the panelists on the affordable criterion is illustrated by the horizontal width of the ellipse signifying a given policy option, while disagreement among the panelists on the reasonable access criterion is shown by the vertical height of the ellipse. Greater disagreement corresponds to longer distances (e.g., the greatest disagreement on the importance of a policy option for the reasonable access criterion occurred for the highest ranked policy option of community-based health care centers).

Figures 5 and 6 compare the quantitative results for the reasonable access and quality criteria and the affordable and quality criteria, respectively. Interestingly, when evaluated by each of the three criteria, community-based health care centers consistently ranked among the most important policy options, but simultaneously exhibited one of the highest levels of disagreement (compare Figures 4, 5, and 6).
Figure 4. Summary of the numerical ranking of policy options related to preventive care for the New Mexico health care system according to the reasonable access and affordable criteria. For any policy option, the length of the horizontal axis of the ellipse represents the level of disagreement among the individual members of the panel on the affordable criterion, while the length of the vertical axis of the ellipse corresponds to the level of disagreement among the individual members of the panel on the reasonable access criterion.

Information Systems

The third Vital Issues panel (see Appendix C) addressing information systems generated five policy options as follows:

*Adopt regulations and/or legislation requiring the use of a technologically based process to define standardized data sets needed for proper analysis of New Mexico health care needs and outcomes [Data Sets].*

*Develop, implement, and appropriately finance a health information system architecture capable of providing primary data and analytic results such as needs assessments, benchmarking, and outcomes [System Architecture].*

*Develop, implement, and support the maintenance of an appropriately funded, integrated, state health information system to provide information pertaining to those health factors referenced in Section 24-14A-3 of the Health Information System Act of 1989; patient outcomes; provider and payer performance; waste, fraud, and abuse; epidemiology; and any other mandated data [Data Collection].*
Figure 5. Summary of the numerical ranking of policy options related to preventive care for the New Mexico health care system according to the reasonable access and quality criteria. For any policy option, the length of the horizontal axis of the ellipse represents the level of disagreement among the individual members of the panel on the quality criterion, while the length of the vertical axis of the ellipse corresponds to the level of disagreement among the individual members of the panel on the reasonable access criterion.

Phase in the collection of sensitive information and the release of non-aggregate data on health care providers as the security, integrity, and accuracy of the state health information system are proven [Sensitive Information].

Provide incentives to develop and maintain community-based medical records with maximum protection of individual privacy and autonomy [Records].

Because the policy options for data sets, system architecture, and data collection represented three distinct phases of a continuous process to establish a health information system in New Mexico, these options were packaged into a single policy option under the label data definition when evaluated in comparison to the remaining two policy options.

The quantitative analysis of the paired comparisons performed by each panelist produced the following ranking of the three policy options, in descending order, according to each of the three criteria of reasonable access, affordable, and quality:
Figure 6. Summary of the numerical ranking of policy options related to preventive care for the New Mexico health care system according to the affordable and quality criteria. For any policy option, the length of the horizontal axis of the ellipse represents the level of disagreement among the individual members of the panel on the quality criterion, while the length of the vertical axis of the ellipse corresponds to the level of disagreement among the individual members of the panel on the affordable criterion.

- data definition;
- sensitive information; and
- records.

A graphical summary of the quantitative results for the reasonable access criterion compared to the quantitative results for the affordable criterion is shown in Figure 7. Policy options plotted upward and to the right are judged to be the most important (e.g., data definition received the highest average score from the panelists of 4.3 for the reasonable access criterion, as well as the highest average score of 4.4 on the affordable criterion in Figure 7). Disagreement among the panelists on the affordable criterion is illustrated by the horizontal width of the ellipse signifying a given policy option, while disagreement among the panelists on the reasonable access criterion
Figure 7. Summary of the numerical ranking of policy options related to information systems for the New Mexico health care system according to the reasonable access and affordable criteria. For any policy option, the length of the horizontal axis of the ellipse represents the level of disagreement among the individual members of the panel on the affordable criterion, while the length of the vertical axis of the ellipse corresponds to the level of disagreement among the individual members of the panel on the reasonable access criterion.

is shown by the vertical height of the ellipse. Greater disagreement corresponds to longer distances (e.g., the greatest disagreement on the importance of a policy option for the reasonable access criterion occurred for the lowest ranked policy option of records).

Figures 8 and 9 compare the quantitative results for the reasonable access and quality criteria and the affordable and quality criteria, respectively. Interestingly, when evaluated by each of the three criteria, data definition consistently dominated the rankings, while simultaneously exhibiting the smallest disagreement among the scores assigned by individual panelists (compare Figures 7, 8, and 9).
Figure 8. Summary of the numerical ranking of policy options related to information systems for the New Mexico health care system according to the reasonable access and quality criteria. For any policy option, the length of the horizontal axis of the ellipse represents the level of disagreement among the individual members of the panel on the quality criterion, while the length of the vertical axis of the ellipse corresponds to the level of disagreement among the individual members of the panel on the reasonable access criterion.

**Action Items**

During the course of the discussions on and ranking of preventive care and information systems policy options, 17 specific action items emerged. Fourteen of these actions items were associated with one of the policy options, while three items were judged to be not directly associated with any specific policy option. These action items include:

**Incentives**

- *Provide financial incentives (tax credits) for medical providers and/or employers for qualified expenditures on wellness programs and activities*

- *Establish financial incentives (tax credits) for certified providers of preventive care services in rural areas*

**Education**

- *Mandate health education programs at all levels in the public school system*
Figure 9. Summary of the numerical ranking of policy options related to information systems for the New Mexico health care system according to the affordable and quality criteria. For any policy option, the length of the horizontal axis of the ellipse represents the level of disagreement among the individual members of the panel on the quality criterion, while the length of the vertical axis of the ellipse corresponds to the level of disagreement among the individual members of the panel on the affordable criterion.

- **Require advertisers of alcohol and tobacco products to spend a fixed percentage of all advertising expenditures in New Mexico on health education programs**

**Community-Based Health Care Centers** -

- **Allocate public funds to the establishment of community-based health care centers for health promotion and disease prevention**

- **Require all medical practitioners receiving education and training in state-supported institutions to gain practical experience in community-based health care centers**

**Needs Assessments** -

- **Allocate public funds to a statewide, integrated needs assessment for comprehensive disease prevention and health promotion programs**

- **Mandate public access to needs assessment information while protecting legitimate confidentiality requirements**

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Data Definition -

- Collect, analyze, and make available information and data to support preventive health care practices and to facilitate the establishment of appropriate benchmark data to measure performance improvement over time.

- Establish and maintain a systematic approach to the collection and storage of New Mexico health care data for longitudinal, demographic, and policy impact studies.

- Utilize expert-system-based protocols in health care centers in rural communities to identify individual and population health risk profiles and to assist in the delivery of primary and preventive health care services.

- Develop a comprehensive geographic information system for presentation and analysis of health status, morbidity, socioeconomic, environmental, and health system data.

Sensitive Information -

- Mandate public availability of non-sensitive information and data relevant to health care, including financial information.

Records -

- Implement substantial penalties for the unauthorized public release of personal health status data.

Other -

- Mandate immunization programs for children at the earliest practical age between zero and five.

- Mandate utilization of a common claim form for health care providers and payers conducting business in New Mexico.

- Develop a standardized billing system to reimburse all providers of health care services.

Concluding Remarks

The Vital Issues Process was used successfully to assist the Health Care Task Force Advisory Group in developing an overarching goal for the New Mexico health care system under which a set of desired outcomes for the system could be defined. Evaluation criteria, articulated as part of the Vital Issues Process, were employed to produce relative rankings of the desired outcomes and seven associated policy options for two of the seven desired outcomes addressing preventive care.
and information systems. Seventeen specific action items related to reforming the New Mexico health care system surfaced during the extensive panel discussions. The 1994 State Legislature plans to consider recommending the convening of five additional Vital Issues panels during 1994 to develop policy options and action items for the remaining five desired outcomes. Upon conclusion of this work, a final Vital Issues panel would be convened to coalesce and rank the full set of policy options designed to achieve the seven desired outcomes and the overarching goal for the New Mexico health care system.
References and Notes


4. Laws of the State of New Mexico, 1991, Chapter 139, First Session of the 40th Legislature.

5. Laws of the State of New Mexico, 1993, Chapter 337, First Session of the 41st Legislature.


10. Laws of the State of New Mexico, 1989, Chapter 29, First Session of the 39th Legislature. According to Section 24-14A-3 of the Health Information System Act of 1989, information on following ten health factors shall be collected and disseminated: mortality and natality, including accidental causes of death; morbidity; health behavior; disability; health system costs, availability, utilization, and revenues; environmental factors; health personnel; demographic factors; social and economic conditions affecting health; and family status.
Appendix A

New Mexico Health Care Task Force

Health Care Task Force Advisory Group

Desired Outcomes for New Mexico's Health Care System

Report of the Policy/Information Working Group Strategic Planning Workshop Albuquerque, New Mexico August 28, 1993
Executive Summary

An overarching goal for the New Mexico health care system was established by the Policy/Information Working Group of the Health Care Task Force Advisory Group to the Health Care Task Force, a Joint Interim Committee of the New Mexico Legislature. The goal statement is:

To provide affordable health care with reasonable access and quality to all New Mexicans.

Seven desired outcomes for the New Mexico health care system were delineated by the Policy/Information Group by condensing a much larger list of desired outcomes developed by this group and the two other working groups: Programs/Education and Finance/Insurance:

Appropriate preventive care based on community education for wellness, with complete information and promotion of individual responsibility.

Improvement in the health policy and decision-making capacity of public and private organizations and individuals through creation of an efficient, technologically current, user-friendly management information and data collection system.

High quality and responsible public and private health care providers and institutions for medical education who participate in the design of and are accountable for changes in the health care system.

Quality health care that is sensitive to the psychosocial, economic, and cultural background of patients and is provided within a reasonable commuting distance, with a minimum of administrative barriers.

Economically viable and efficient health care delivery resulting in financial equity for all stakeholders with implementation of cost containment measures.

Improved health for all New Mexicans.

Maximize freedom of choice for quality physical and mental health coverage through multiple health care delivery systems.

Although all seven of these desired outcomes are judged to be extraordinarily important for the New Mexico health care system, the first three listed consistently scored the highest when the Policy/Information Working Group ranked each desired outcome in comparison to the other six desired outcomes according to three criteria:

Reasonable access -- opportunity for all New Mexicans to obtain basic health care services.

Affordable -- cost of health services must be reasonable in the aggregate as a component of the economy and the impact must be equitably shared by all stakeholders.

Quality -- effective and efficient use of health care technologies and services to advance overall wellness, including outcome research, benchmarking standards of care, and measurement protocols.
Introduction

The Health Care Task Force Advisory Group was appointed in mid-1993 by the Speaker of the New Mexico House of Representatives and the President Pro Tem of the New Mexico Senate to provide input and advice to the Health Care Task Force, a Joint Interim Legislative Committee of the New Mexico State Legislature. The Health Care Task Force, created by Laws 1993, Chapter 337, was charged to facilitate the development and implementation of a comprehensive health care delivery system for New Mexico and to report its findings and recommendations on access, availability, quality, and cost issues to the Legislature during the 1994 Legislative Session.

Three working groups, namely, the Policy/Information Working Group, the Programs/Education Working Group, and the Finance/Insurance Working Group, were formed to focus attention on major areas of concern to the Advisory Group. These working groups began their deliberations in August 1993 to articulate important health care issues. An extensive set of desired outcomes for the New Mexico health care system was developed by the three working groups and served as the basis for follow-on work by the Policy/Information Working Group.

Approach

Fifteen members of the Policy/Information Working Group (see Attachment A) convened on August 28, 1993, to participate in a strategic planning workshop (see Attachment B) to collapse the extensive set of desired outcomes to a more manageable list and to provide additional definition to the resulting composite desired outcomes. In order to accomplish these objectives in a systematic manner, the Policy/Information Working Group was charged (see Attachment C) to:

1. develop a working definition of an overall goal for the New Mexico health care system;
2. identify and develop working definitions for criteria for evaluating candidate desired outcomes for the New Mexico health care system;
3. identify and develop working definitions for desired outcomes for the New Mexico health care system; and
4. prioritize the identified desired outcomes.
The methodology developed by Sandia National Laboratories, called the Vital Issues Process (See Attachment D), was employed to assist the Policy/Information Working Group in meeting its charge.

**Overarching Goal for the New Mexico Health Care System**

To stimulate thought and to provide a foundation for the Policy/Information Working Group discussions, a strawman goal statement was provided to the members of the Working Group in advance of the meeting, viz.:

*Provide equitable access to high quality health care at a reasonable cost.*

This goal statement triggered a lengthy discussion of the relative merits of being focused on access or alternatively emphasizing the provision of health care. Members of the Working Group expressed concern over the subjectivity of key terms such as equitable, quality, and cost. The meanings of these terms are subject to potentially widely varying interpretations depending upon one's perspective. An inherent contradiction between high quality, equitable access, and reasonable cost was noted by the Policy/Information Working Group. Interestingly, achievement of any two of these three objectives of a health care system may make the third objective unobtainable.

Although health care became the clearly preferred focus of the goal statement, considerable discussion concerning appropriate modifiers of the words access, quality, and cost occupied the attention of the Policy/Information Working Group. Candidate modifiers for access included equitable, universal, easy, and reasonable, including geographic and financial considerations. Consensus was obtained quickly among the members of the Working Group that high quality should be replaced simply by quality. The focus on health care precipitated discussions on the level of health care services to be delivered ranging from a basic health care package involving minimal services to a more comprehensive package of services. This dilemma was resolved by adopting the concept of affordable health care, thereby allowing cost factors to influence the level of health care to be provided.
The explicit appearance of cost in the strawman goal statement led to a thorough discussion of whether cost should be considered as the principal driver behind the goal for the health care system or simply as a necessary external constraint on the system. Members of the Working Group struggled with weighing the feasibility of expanding the funds available to support the health care system versus adopting a fixed-sum perspective under which the focus becomes reallocations of existing expenditures. These cost issues were left partially unresolved by the Policy/Information Working Group in order to focus attention on achieving consensus on a workable goal statement.

Several alternative wordings for the goal statement were generated and analyzed with the Policy/Information Working Group reaching closure on the overarching goal as follows:

*To provide affordable health care with reasonable access and quality to all New Mexicans.*

The three major principles of affordable, access, and quality encompass complex operational principles. Specifying the provision of health care to all New Mexicans called for a definition of who is a New Mexican. A discussion of this issue was deferred with the understanding that the Policy/Information Working Group would revisit this topic in the context of the desired outcomes.

**Identification of Evaluation Criteria**

A strawman set of criteria for evaluating candidate desired outcomes for the New Mexico health care system was provided to the members of the Working Group in advance to encourage reflection on the subject prior to the meeting. These criteria were closely associated with the strawman overarching goal statement as follows:

- *equitable access*;
- *high quality*; and
- *reasonable costs*. 
Following an intense discussion of the strawman criteria and consideration of the consensus goal statement, the Policy/Information Working Group agreed upon a modified set of three criteria for use in evaluating desired outcomes, namely:

- reasonable access;
- affordable; and
- quality.

Working definitions of these three criteria were posited by the Policy/Information Working Group to serve as a basis for discussion, to wit:

- reasonable access -- opportunity for all New Mexicans to obtain basic health care services regardless of income levels, geographic locations, or health status;
- affordable -- ability to provide health services that are equitably shared by government, employers, individual citizens, providers, manufacturers, and anyone else significantly involved; and
- quality -- cost effective use of technology to advance overall wellness including outcome research, benchmarking standards of care, and measurement protocols.

During the ensuing discussion of reasonable access, the Policy/Information Working Group again was drawn toward articulating the meaning of basic health care services within the spectrum ranging from minimal, through appropriate, to comprehensive care. After considerable discussion and observation that previously appointed health care study groups had debated this issue, agreement was reached to adopt an existing definition* rather than attempt to redefine basic health care services in the context of the charge to the Policy/Information Working Group. Other issues raised included the need for access to all types of providers, both conventional and alternative; concern about listing examples of specific characteristics being exclusive or inclusive; and about the appropriateness of identifiers such as ethnicity, population sensitivity, cultural diversity, cultural differences, age, gender, and so on. In order to avoid a somewhat

*As defined by the Governor's Health Policy Advisory Committee in 1988, basic health services respond to basic health needs, and foster, restore, maintain, and promote optimal health and quality of life. Basic health services include promotion, protection, and preventive services and acute treatment, pharmaceutical, and chronic care services.
subjective listing of qualifying statements, the Policy/Information Working Group reached consensus on the following simplified definition:

*Reasonable access -- opportunity for all New Mexicans to obtain basic health care services.*

The discussion on the criterion of affordable centered on observations that costs must be equitably shared within the health care system; the impact of the cost of health care must be shared equitably; the cost of financing health systems not be to the detriment of other aspects of the state economy; and there be a balance between employment opportunities, especially in small businesses, economic development, and health care. These issues argue for a systems approach to health care cost considerations. A second set of concerns voiced by the members of the Working Group addressed the concept of an appropriate limiting factor related to cost, such as the level of available funds, expenditures with predetermined budgets, society's capability and willingness to finance health care, and the ability of individuals to pay for services. As the result of these exchanges among the members of the Working Group, an agreed upon definition emerged as follows:

*Affordable -- cost of health services must be reasonable in the aggregate as a component of the economy and the impact must be equitably shared by all stakeholders.*

Three major issues arose during the deliberations on a consensus working definition of quality. First, the Policy/Information Working Group readily agreed that cost factors should be separate from quality and were adequately handled in the working definition for affordable. Secondly, quality health care services involve more than technology and the role of providers needs to reflect both the technological and human or personal aspects of health care delivery. Lastly, clear differentiation between effective, in the context of whether or not a treatment accomplishes the intended result, and efficient, in the sense of only necessary treatments being administered and valuable resources not being squandered on activities poorly matched with the desired outcome, is necessary. These issues served as the basis for revisions to the proposed working definition for the criterion of quality, viz.:
Quality -- effective and efficient use of health care technologies and services to advance overall wellness, including outcome research, benchmarking standards of care, and measurement protocols.

In carrying out the charge of identifying evaluation criteria, the members of the Working Group were asked to assess the characteristics of necessity, sufficiency, and operationality. Each criterion would satisfy the necessary condition if elimination from the set would omit an important aspect of judging candidate desired outcomes. Collectively, the three criteria would satisfy the sufficient condition if all of the important aspects of screening desired outcomes are captured. Finally, the operational condition would be met if the criteria individually and collectively can be applied with minimal ambiguity to assess the relative importance of candidate desired outcomes.

During the review of the criteria for these three conditions, the lack of a suitable definition for the phrase "all New Mexicans" surfaced again as it had as part of the construction of the overarching goal statement. As difficult, contentious, and politically charged as this issue could become, the members of the Working Group uniformly agreed consensus should be sought in order to proceed effectively.

Four candidate definitions for a New Mexican in the context of the New Mexico health care system were suggested by the members of the Working Group:

- legal residents of New Mexico;
- any individual physically in New Mexico;
- any person participating in the cultural and/or economic life in New Mexico; and
- individuals as defined in the forthcoming guidelines developed by the Clinton Administration.

A key distinction in this conundrum is the responsibility of the providers of health care in contrast to the responsibility of the State of New Mexico in establishing a workable health care system. In the former instance, providers are bound to the concept of delivering health care services to all individuals needing and requesting care. On the other hand, the State may be required to view the population served by the health care system in a more narrow sense.
The members of the Working Group struggled with this issue, while noting the particular relevance and importance of Mexico-New Mexico border communities, unauthorized immigrants, migrant workers, the creation of an unintended incentive for individuals from elsewhere being attracted to New Mexico to access health care services unavailable to them in their home communities, and the tendency of a completely open system to effectively detract from the quality of available services because of cost constraints. These concerns are especially challenging in a state, such as New Mexico, with low per capita incomes and high incidences of individuals without health care coverage. Even though a majority of the members of the Working Group rejected the fourth possibility of leaving clarification of the issue to the federal government, the Policy/Information Working Group was unable to resolve the conflicting issues among the first three definitions. While a moderate preference emerged for defining New Mexicans as legal residents, inconsistencies within this definition present in other state programs, such as the public school system, led the Policy/Information Working Group to back away from forcing a complete consensus on this issue. Instead, the choice was made to not rigorously define New Mexicans in the context of the New Mexico health care system at this time, but rather to address and resolve this dilemma in another forum.

**Desired Outcomes for the New Mexico Health Care System**

A strawman set of seven desirable outcomes for the New Mexico health care system was provided to the members of the Working Group to establish a starting point for the discussions as follows:

- *patient-focused, efficient, and equitably accessible statewide health care;*
- *improved health for all New Mexicans;*
- *systemwide freedom of choice for high quality physical and mental health care with guaranteed catastrophic coverage;*
- *economically viable and financially equitable health care for all individuals;*
- *strong education, preventive care, and wellness programs with an emphasis on individual responsibility;*
• efficient, user-friendly patient information and billing systems; and
• high quality, well-trained, and responsible public and private health care providers.

These desired outcomes were derived from lists developed previously by the Policy/Information, Programs/Education, and Finance/Insurance Committees of the Advisory Working Group (see Attachment E). By eliminating duplication and consolidating concepts expressed by the committee members in the 36 desired outcomes, the set of seven strawman desired outcomes was generated. To ensure that all of the important concepts developed by the committees of the Advisory Working Group were embraced by the strawman set of desired outcomes, an item-by-item comparison was performed. A summary of these results is given in Attachment F. In order for the Vital Issues Process to be effective in establishing priorities, relationships need to be present between the issues to be ranked and the criteria chosen for evaluating the issues. The results of testing this condition are illustrated in Attachment G.

**Improved Health for New Mexicans**

Improved health for all New Mexicans is a desired outcome that may be measured directly by such metrics as infant mortality, maternal mortality, longevity, employee absenteeism, and workers' compensation claims. While this desired outcome contains an element of idealism, a health care system not striving for this outcome is virtually unimaginable. In fact, this objective is a major reason for state government involvement in the health care system. Observations made during the Policy/Information Working Group discussion of this desired outcome included the close relationship with access issues; importance of the health care system encompassing a full spectrum of responsibilities to handle acute and chronic ailments, as well as wellness programs; linkages to accident prevention and substance abuse; implicit measures of quality, especially related to incremental investments in the health care system being translated into improved health status; and uncertainties regarding how to achieve and how to pay for improved health. At the conclusion of this discussion, the Policy/Information Working Group adopted the desired outcome as follows:

*Improved health for all New Mexicans.*
Preventive Care

The Policy/Information Working Group unanimously endorsed the concept of preventive care always providing measurable returns in terms of cost and health. Education, prevention, and wellness programs result in the largest positive impact on health per dollar expended. Revisions to the strawman language resulted in the following expression for a desired outcome related to preventive care:

Preventive care based on community education for wellness, with complete information, choice, and confidentiality, and with promotion of individual responsibility.

Discussions of this desired outcome focused on the advantages of school-based health care centers, especially in rural areas; in establishing community involvement in the health care system; moderating costs; using technology and services efficiently; advancing overall wellness; and maintaining standards and protocols. Special benefits accrue by increasing self-esteem of students, lowering teen pregnancy rates, and reducing school drop out rates. An important element for success of school-based health care centers is education and training of school teachers in order for them to be comfortable in including instruction on preventive care in the curriculum. Opportunities for significant financial health care multipliers were cited by the members of the Working Group, an example of which is the cost of one medical complication, such as measles, being equal to the cost of immunization for an entire rural community.

The Policy/Information Working Group was not uniformly supportive of including the concepts of choice and confidentiality in the desired outcome statement. In fact, choice may be in conflict with wellness, for example, in the case of one's right to refuse participation in immunization programs. Likewise, full confidentiality is unlawful for certain infectious diseases. Following reflection on these issues, the consensus statement of the preventive care desired outcome became:

Appropriate preventive care based on community education for wellness, with complete information and promotion of individual responsibility.
Economic Viability and Financial Equity

The Policy/Information Working Group began discussion of economic and financial considerations in the health care system by revising the strawman statement in the following manner:

_Economically viable and financially equitable health care for all individuals, with the reduction of waste, duplication of services, administration costs, and profiteering, while seeking fair compensation to providers, tort reform, and prioritization of services._

This statement triggered an intense examination of a wide variety of issues related to the financial aspects of the health system. Topics addressed included the exceptionally high percentage of New Mexicans without health insurance coverage; high and rising administrative costs in the health care system; tendency for health care facilities to be full service centers in the absence of certificate of need procedures; funds being removed from the health care system by dividend payments to stockholders of private corporations delivering health care services; restrictions on fees charged by health care providers by Medicare and Medicaid payment policies, especially with regard to creating inadequate compensation opportunities for providers in rural areas; and the need for tort reform to mitigate the rise in malpractice insurance costs.

The unwillingness of taxpayers to pay more for health care services and the inability of many employers, especially small businesses, to pay more for employee health insurance were discussed in the context of the practical level of health care to be provided. Basic benefit plans can stretch the system to find payers for uncovered services that might otherwise be included in a comprehensive plan. Prioritization of health care services, such as the Oregon plan, presents a difficult design challenge.

Cost containment in contrast to financial equity, rights versus privileges in health care, and concern regarding lists of items being interpreted as inclusive or exclusive instead of illustrative occupied the attention of the Policy/Information Working Group. Considerable difficulty arose in reaching consensus on the financial equity and cost containment issues, prompting the Policy/Information Working Group to explore the utility of deriving a separate desired outcome for cost containment and narrowing this desired outcome to economic and financial issues. While
struggling with acceptable language for two desired outcomes and considering the attractiveness of including specific examples in the statements of desired outcomes, consensus emerged on a simplified desired outcome, namely:

Economically viable and efficient health care delivery resulting in financial equity for all stakeholders with implementation of cost containment measures.

Quality Health Care

The Policy/Information Working Group restructured the strawman desired outcome involving the patient-focused, efficiency, and accessible aspects of health care to emphasize quality of health care within the context of these parameters:

Quality health care, taking into account the psychosocial, economic, and cultural background of the patient, which can be measured by outcome research, benchmarking standards of care, and measurement protocols, and which can be provided within a reasonable commuting distance with the least amount of administrative barriers to obtain the care.

Discussions of this desired outcome centered on accessibility issues, specifically economic, geographical, and cultural ones; administrative practices impeding otherwise accessible health care services including language barriers; accounting for health care services and needs beyond those related to physical ailments; and the lack of health care insurance coverage for a significant fraction of the population in New Mexico. The Policy/Information Working Group quickly reached agreement on this desired outcome by shortening the statement as follows:

Quality health care that is sensitive to the psychosocial, economic, and cultural background of patients and is provided within a reasonable commuting distance, with a minimum of administrative barriers.

Health Policy

The Policy/Information Working Group significantly expanded the strawman desired outcome concerning management information systems to encompass health care policy-making. In fact, information systems designed to facilitate more informed policy directives became the focus of the desired outcome. As part of this discussion, the Policy/Information Working Group reviewed the experiences of health care policy initiatives undertaken in 1985, 1988, and 1990, respectively, the Health Care Cost and Access Study Commission, created by the State
Legislature; the Governor's Health Policy Advisory Committee; and the Health Care Access Task Force, authorized by Senate Memorial 19.

The Policy/Information Working Group acknowledged the need for a health care policy and strategic vision to provide an underpinning for all desired outcomes, the importance of dynamic planning processes, the special challenges experienced by some past policy-making efforts in obtaining broad representation of key stakeholder and constituency groups, and the requirement for accurate and more timely information upon which policy can be formulated and resource allocation decisions can be made. These discussions resulted in agreement on the following desired outcome:

*Improvement in the health policy and decision-making capacity of public and private organizations and individuals through creation of an efficient, technologically current, user-friendly management information and data collection system.*

**Health Care Providers**

Discussion of the role of health care providers began by restatement of the strawman desired outcome as:

*High quality and responsible public and private health care providers who are accountable for changes in the delivery system.*

In analyzing this desired outcome, the members of the Working Group considered a variety of topics including education of health care providers; provider accountability; providers of marginal quality representing an unacceptable drain on the health care system; capturing the wisdom of providers acquired through education, training, and patient interaction to influence changes in the health care system; and providers unfortunately often being overlooked and at times ignored when health care system changes are considered.

Some members of the Working Group postulated that for significant changes to occur in the health care paradigm contributions from individuals with fresh and uninhibited visions may well be necessary. In general, evolutionary changes are often best driven by individuals within a given system, while outsiders may be required to effect needed revolutionary changes. Following this discussion, a consensus was obtained on the expression of this desired outcome:
Freedom of Choice

Further articulation of the strawman desired outcome encompassing freedom of choice resulted in the following statement to serve as a discussion point:

*Systemwide freedom of choice for high quality physical and mental health care provided by licensed practitioners of the healing arts with guaranteed catastrophic coverage.*

Freedom of choice involves choice of the type of provider and the choice of individual providers within a given provider class. Consideration of the former case led to a lengthy discussion regarding the relationship between limiting access to alternative providers and reductions in personal freedom of choice, maintaining competition in the health care system and allowing access to alternative providers, and access to alternative providers within a single system and affordable health care options being available. Examples of alternative health care providers in the context of this discussion included chiropractors, counselors, doctors of oriental medicine, massage therapists, midwives, and optometrists. Some members of the Working Group expressed concerns regarding consistency in compensation policies for alternative and traditional providers if all qualified providers are not available to patients within the same health care system. Because alternative providers commonly have access to lower malpractice insurance rates than traditional providers, inclusion of these providers may enhance affordability of a health care delivery system.

Through considerable negotiation on the specific language of this desired outcome, consensus was achieved on the following statement:

*M Maximize freedom of choice for quality physical and mental health coverage through multiple health care delivery systems.*

The modifier high for quality was deleted to be consistent with the omission of similar value judgments from the overarching goal.
Ranking of Desired Outcomes

The Vital Issues Process employs a paired comparison procedure requiring individual members of the Working Group to privately assess the relative importance of each desired outcome according to a single criterion compared to each of the other desired outcomes for that same criterion. This process is repeated until paired comparisons are made in a similar manner for all criteria. To translate these assessments into quantitative scores, the following numerical scale is used: much more important = 5; more important = 4; equally important = 3; less important = 2; and much less important = 1.

Prior to scoring individual desired outcomes, one member of the Working Group champions or markets the desired outcome to the remainder of the Policy/Information Working Group in the context of the evaluation criteria. A second member of the Working Group is assigned the role of making counterpoints to this presentation. This exchange is followed by a discussion and further elaboration of any related issues by the complete Policy/Information Working Group. A set of special scoring sheets is provided to facilitate the recording of numerical scores for subsequent analysis. In this manner, a consensus ranking of the designed outcomes, along with numerical scores assigned to each desired outcome, are obtained simultaneously.

The quantitative analysis of the paired comparisons performed by each member of the Working Group produced the following ranking of the seven desired outcomes, in descending order, according to the criterion of reasonable access:

- preventive care;
- quality health care (tie);
- health policy (tie);
- health care providers;
- improved health for New Mexicans;
- economic viability and financial equity; and
- freedom of choice.
When judged by the affordable criterion, the relative ranking of the desired outcomes assigned by the members of the Working Group is, in descending order:

- preventive care;
- economic viability and financial equity;
- health policy (tie);
- quality health care (tie);
- health care providers;
- freedom of choice; and
- improved health for New Mexicans.

For the quality criterion, the members of the Working Group ranked the desired outcomes in descending order as follows:

- preventive care;
- health policy;
- health care providers;
- quality health care;
- improved health for New Mexicans;
- economic viability and financial equity; and
- freedom of choice.

A graphical summary of the quantitative results for the reasonable access criterion compared to the quantitative results for the affordable criterion is shown in Figure 1. Desired outcomes plotted upward and to the right are judged to be the most important (e.g., preventive care received the highest average score among the members of the Working Group of 3.3 for the reasonable access criterion as well as the highest average score of 3.4 for the affordable criterion in Figure 1). Disagreement among the members of the Working Group on the affordable criterion is illustrated by the horizontal width of the ellipse signifying a given desired outcome, while disagreement among the members of the Working Group on the reasonable access criterion is shown by the vertical height of the ellipse. Greater disagreement corresponds to longer distances.
Figure 1. Summary of the numerical ranking of desired outcomes for the New Mexico health care system according to the reasonable access and affordable criteria. For any desired outcome, the length of the horizontal axis of the ellipse represents the standard deviation of the scores assigned by the individual members of the Working Group on the affordable criterion, while the length of the vertical axis of the ellipse corresponds to one standard deviation of the scores assigned by the individual members of the Working Group on the reasonable access criterion.

(e.g., the greatest disagreement on the importance of a desired outcome for both the reasonable access and affordable criteria occurred for freedom of choice as is evident in Figure 1).

Figure 2 compares the quantitative results for the reasonable access and quality criteria. Preventive care received the highest average score on both of these criteria. Again, freedom of choice had the highest disagreement among members of the Working Group on the quality criterion (see Figure 2).

A comparison of the quantitative results for the rankings under the affordable and quality criteria is given in Figure 3. Interestingly, when evaluated by each of the three criteria, freedom of choice exhibited the greatest disagreement among members of the Working Group (compare Figures 1, 2, and 3).
Figure 2. Summary of the numerical ranking of desired outcomes for the New Mexico health care system according to the reasonable access and quality criteria. For any desired outcome, the length of the horizontal axis of the ellipse represents the standard deviation of the scores assigned by the individual members of the Working Group on the quality criterion, while the length of the vertical axis of the ellipse corresponds to one standard deviation of the scores assigned by the individual members of the Working Group on the reasonable access criterion.

Concluding Remarks

Summary

The Policy/Information Working Group of the Health Care Task Force Advisory Group effectively met the charge of articulating an overarching goal for the New Mexico health care system, identifying and developing working definitions for criteria for evaluating desired outcomes for the New Mexico health care system, identifying and developing working definitions for desired outcomes for the New Mexico health care system, and prioritizing the identified desired outcomes. The overarching goal is:

To provide affordable health care with reasonable access and quality to all New Mexicans.
Seven desired outcomes were identified, discussed in detail, and evaluated for relative importance by the members of the Working Group in accordance with three criteria developed by the Policy/Information Working Group, namely, reasonable access, affordable, and quality. Three of the seven desired outcomes received consistently high rankings:

- appropriate preventive care based on community education for wellness, with complete information and promotion of individual responsibility;

- improvement in the health policy and decision-making capacity of public and private organizations and individuals through creation of an efficient, technologically current, user-friendly management information and data collection system; and

- high quality and responsible public and private health care providers and institutions for medical education who participate in the design of and are accountable for changes in the health care system.
Preventive care was ranked as the most important desired outcome under each of the three criteria.

**Recommendations**

The next logical step for the Health Care Task Force Advisory Group is to articulate action plans for the agreed upon desired outcomes. Classes of potential actions include regulations; fiscal incentives; information, education, and outreach programs; and technology implementation. The three criteria of reasonable access, affordable, and quality could be used to screen and rank candidate actions. By capitalizing on the structured methodology of the Vital Issues Process, a clearly articulated and prioritized set of actions could ultimately be developed for each desired outcome.
Attachment A

Members of the Policy/Information Working Group

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Rapporteur
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Santa Fe
Attachment B

AGENDA

Health Care Task Force Advisory Group
Policy/Information Working Group
Strategic Planning Workshop
Albuquerque Convention Center
Albuquerque, New Mexico
August 28, 1993

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Principal Discussants(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00</td>
<td>Welcome</td>
<td>Frank Martinez</td>
</tr>
<tr>
<td>9:15</td>
<td>Introductions and Overview of the Vital Issues Process</td>
<td>Dennis Engi</td>
</tr>
<tr>
<td>9:50</td>
<td>Discussion of the Overall Goal</td>
<td>All (facilitated by Engi)</td>
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<tr>
<td>10:30</td>
<td>Break</td>
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<tr>
<td>10:45</td>
<td>Discussion of Screening Criteria</td>
<td>All (facilitated by Engi)</td>
</tr>
<tr>
<td>11:30</td>
<td>Catered Lunch</td>
<td></td>
</tr>
<tr>
<td>12:15</td>
<td>Discussion of Composite Desired Outcomes</td>
<td>All (facilitated by Engi)</td>
</tr>
<tr>
<td>2:00</td>
<td>Explanation of the Ranking Process</td>
<td>Dennis Engi</td>
</tr>
<tr>
<td>2:15</td>
<td>Break</td>
<td></td>
</tr>
<tr>
<td>2:30</td>
<td>Ranking of Desired Outcomes</td>
<td>All (facilitated by Engi)</td>
</tr>
<tr>
<td>4:30</td>
<td>Summary and Close</td>
<td>Tex Ritterbush</td>
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<tr>
<td>4:45</td>
<td>Adjourn</td>
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</table>
You are invited to participate in a strategic planning meeting (on Saturday, August 28, 1993, at the Albuquerque Convention Center from 9:00 am through 4:45 pm) in support of the New Mexico Health Care Task Force. This meeting is intended to identify and to rank-order a composite set of desired outcomes which will clearly lead to substantive improvements in New Mexico's health care system. The approach to be used to facilitate this activity is the Vital Issues Process.

The Vital Issues Process is a strategic planning tool developed by Sandia National Laboratories which identifies (through panel discussions) a portfolio of actions aimed at satisfying an organization's high-level goals and objectives. The Vital Issues Panel for New Mexico Health Care will provide the Health Care Task Force with information and stakeholder input that will be valuable in improving the ability to provide equitable access to high quality health care at a reasonable cost.

This meeting will be an intensive, one-day exercise involving experts drawn from a broad spectrum of institutional affiliations to ensure that the proper perspectives are brought into the process. Our hope is that representation of these various institutional perspectives will result in a dialogue focused on the variety of relevant dimensions associated with the salient aspects of choosing preferred approaches to achieving the desired improvements in the State's health care system. Four distinct, but interrelated, products are expected to result from the panel discussions and deliberations:

- A working definition of the overall goal of the State's health care system
- A list of (and working definitions for) criteria useful for evaluating the relative merits of candidate outcomes.
- A list of (and working definitions for) desired outcomes.
- A ranking of (and an indication of the level of agreement among panelists regarding) these desired outcomes.

To stimulate your thinking, a strawman goal, set of criteria, and a composite set of desired outcomes are included. I want to emphasize that these strawmen are intended to stimulate your thinking about this topical area. Once the panelists collectively develop a working definition for the overall goal, a set of criteria, and a composite set of desired outcomes, a structured process using pair-wise comparisons to ascertain the relative importance of the desired outcomes will be facilitated.
To help service the ambitious nature of this panel meeting, we will have both a facilitator and a rapporteur. Our intent is to prepare a report summarizing the panel meeting. Prior to publication of the report, each panelist will have an opportunity to review and comment on the draft report. This report is expected to be provided to subsequent panels whose objectives will be to identify and rank specific mechanisms to best achieve the desired outcomes. Therefore, the products of this first panel will provide a foundation for screening desired outcomes which are believed will result in substantive improvements in New Mexico's health care system.

In preparation, please think through the strawman goal, screening criteria and desired outcomes. We plan for the panel discussions to generate clear, unambiguous definitions that are as complete, yet succinct, as possible. Also in developing the composite desired outcomes, three different conditions will be considered: necessary, sufficient, and operational. An outcome satisfies the necessary condition if its elimination from the set of outcomes allows an important aspect of meeting the overall health care goal to go unrecognized. The set of outcomes satisfies the sufficient condition if all the important aspects of the overall health care goal are captured. And, finally, the outcomes are operational if they can be achieved by implementing the appropriate actions.

If you have any questions concerning any aspect of the panel, please contact Dennis Engi at (505) 845-8284. Thank you, in advance, for your participation on this panel. I look forward to seeing you on August 28.

Sincerely,

Dennis Engi, Manager
Strategic Technologies Department
New Mexico Health Care

~ Strawman Goal ~

Provide Equitable Access to High Quality Health Care at a Reasonable Cost.

Strawman Composite "Desired Outcomes"

DO1: Patient-focused, efficient, and equitably accessible statewide healthcare.

DO2: Improved health for all New Mexicans.

DO3: Systemwide freedom of choice for high quality physical and mental health care with guaranteed catastrophic coverage.

DO4: Economically viable and financially equitable healthcare for all individuals.

Strawman Selection Criteria for Desired Outcomes

- Equitable Access
- High Quality
- Reasonable Costs

Strawman Composite "Desired Outcomes" (Cont'd.)

DO5: Strong education, preventive care and wellness programs with an emphasis on individual responsibility.

DO6: Efficient, user-friendly patient information and billing system.

DO7: High quality, well-trained, and responsible public and private health care providers.
The Vital Issues Process

**Process Purpose**

The Vital Issues process is a strategic planning tool which identifies a portfolio of programmatic activities (an 'investment portfolio') for an organization, aimed at satisfying its high-level goals and objectives. The process requires a high level of stakeholder involvement, thus predisposing acceptance of the programmatic endeavors by those stakeholder communities.

**Process Description**

The Vital Issues process is a multi-stage process, involving a series of day-long, intensive workshops, each of which builds on the results of the previous. The first workshop focuses on definitions, identifying target goals and objectives, describing the type of issues or problems addressed by the sponsoring organization, and identifying criteria for issue or problem selection. The next workshop (or set of workshops) uses the selection criteria and the definition of the desired issue or problem to identify and rank a set of such issues. The following workshop (or set of workshops) selects one of those identified issues (probably but not necessarily the highest ranked) and identifies and ranks associated programmatic activities. Subsequent workshops (or sets of workshops) can focus on tasks associated with specific programmatic activities. The process is illustrated in figure 1.

As group dynamics constrain the effective size of a panel to no more than twelve participants (with an optimal size of eight to ten), it is possible to run parallel panels on the same topic if the number of stakeholder or constituency groups is greater than twelve. In such a case, representatives from the topical panels should be brought together into a 'composite' panel to generate integration of the results of the separate panels. This is illustrated in figure 2.

The panel of participants in each workshop will differ, as expertise will be relevant to the topic at hand. Institutional perspectives key to organizational success (such as private sector, state/federal government, and academe) should be identified a priori and represented on each panel. Each panel also should reflect a broad range of stakeholder communities. Individual panelists should be selected for their expertise and credibility within their professional communities.

**Figure 1**

![Diagram illustration of the Vital Issues Process](image-url)
The Vital Issues process incorporates two primary approaches: a qualitative, or transactional method, which takes a synthetic or dialogical approach and a quantitative, or net benefit maximization method, which performs some analytic activities. The transactional method involves dialogue among individuals or groups with some stake in the sponsoring organization's activities. Such dialogue usually focuses on problem or issue definition (which can include definition of an organization's goals and objectives) and criteria for measuring success through problem solution or goal achievement. Participation in the construction, or synthesis, of those definitions allows participants to become invested in the process. The definitions constructed by these synthetic activities form the environment within which a set of alternatives (such as issues or programs) can be identified. Net benefit maximization uses quantitative methods to perform a cost-benefit analysis on a set given alternatives, seeking to identify the alternative that provides the greatest social (or organizational) good. Both methods are applied in each workshop of the Vital Issues process.

**Figure 3**

**Process Methodology**

[Diagram showing the process methodology with nodes labeled as follows: Composite, Definition of Target, Selection Criteria, Problem Definition, Issue/Problem, Solution/Program, Identity and Rank, and Learn and Rank. Arrows illustrate the flow between these nodes.]
Attachment E

Desired Outcomes for the New Mexico health care system developed by the Health Care Task Force Advisory Group

**Policy/Information Working Group**
1. An affordable basic benefits plan accessible to all New Mexicans
2. Health care is a personal issue (Any system must promote education, prevention, and the acceptance of individual responsibility)
3. An economically viable health care system
4. A demonstrable improvement in health status metrics

**Programs/Education Working Group**
5. Universal access for basic health care package
6. Criteria for provider participation in any health care plan
7. Tort reform
8. Patient-focused outcome criteria (total quality management)
9. More primary care providers
10. Continuum of care linking all phases of patient treatment
11. Freedom of choice in accessing care givers (direct access to full spectrum of providers, professionals, and non-traditional health care delivery specialists)
12. Catastrophic care access
13. Comprehensive health delivery information system
14. Wellness education aimed at prevention of illness
15. Partnerships between public and private providers
16. Smart cards for patient health care information

**Financial/Insurance Working Group**
17. Reduced duplication of capital and personnel resources
18. Redistribution of resources geographically
19. Comprehensive review of the health care delivery system
20. Healthy New Mexicans (improved access, personal responsibility, and education)
21. Cost effective health care system
22. Quality outcomes that are measurable
23. Uniform billings with increased administrative simplicity and decreased administrative costs
24. Catastrophic health care coverage
25. Changed medical education to meet society's needs
26. Experience vs. community ratings for establishing insurance rates
27. Sick vs. health insurance
28. Preventive care
29. Long-term care financing improvements
30. Mental health care financing improvements
31. Regionalization of the health care delivery system
32. Freedom of choice of providers by patients
33. Redefinition of health care expectations of communities
34. Improved information systems to decrease administrative costs and to track outcomes
35. Cultural information systems to decrease administrative costs and to track outcomes
36. Portability
The set of 36 desired outcomes (see Attachment E) for the New Mexico health care system developed by the Policy/Information, Programs/Education, and Finance/Insurance Working Groups of the Health Care Task Force Advisory Group were examined to develop a strawman set of desired outcomes of a more manageable size. By eliminating duplication and consolidating the most fundamental concepts, seven composite strawman desired outcomes were formulated. These outcomes were labeled numerically as indicated in Attachment C without any attempt to assign priority.

Each of the 36 desired outcomes were incorporated into one of the seven composite strawman desired outcomes as shown below. A solid circle indicates a specific working group derived desired outcome being reflected in one of the seven strawman desired outcomes (e.g., the fifth desired outcome of the Finance/Insurance Working Group is encompassed by the fourth desired outcome, DO4, in the strawman set).

**Coverage of Working Group Defined Desired Outcomes by Strawman Composite Desired Outcomes**

![Diagram showing the coverage of working group defined desired outcomes by strawman composite desired outcomes](image-url)
Correlations need to be present between the three strawman criteria and the seven composite strawman desired outcomes in order to ensure that the desired outcomes can be evaluated in the context of the strawman criteria. The existence of widely distributed correlations is a desirable feature of the strawman criteria and desired outcomes. For convenience, these outcomes were labeled numerically as indicated in Attachment C without any attempt to assign priority.

Each of the seven composite strawman were examined for correlations with the three strawman criteria. The results of this examination are shown below. A partially solid circle corresponds to some correlation being observed, with the level of correlation being depicted by the fraction of the circle blackened, while no correlation is indicated by a circle without any shading (e.g., the third strawman desired outcome, DO3, has a strong correlation with the strawman criterion of high quality).

Correlations between Strawman Criteria and Strawman Composite Desired Outcomes

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Legend:
- 素 | Strong Correlation
- ▼ | Moderate Correlation
- 〇 | Little or No Correlation
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Appendix B

New Mexico Health Care Task Force

Health Care Task Force Advisory Group

Preventive Care Policy Options for New Mexico's Health Care System

Report of the
Policy/Information Working Group
Preventive Care Desired Outcome Workshop
Albuquerque, New Mexico
September 11, 1993
Executive Summary

Policy options for the New Mexico health care system were established by a panel consisting of members of the Policy/Information and Programs/Education Working Groups of the Health Care Task Force Advisory Group to the Health Care Task Force, a Joint Interim Committee of the New Mexico Legislature, and representatives of the State of New Mexico. These policy options are designed to help achieve the preventive care desired outcome for the New Mexico health care system established previously by the Policy/Information Working Group, viz.:

Appropriate preventive care based on community education for wellness, with complete information and promotion of individual responsibility.

The four preventive care policy options that were determined to be necessary for any New Mexico health care system are:

Establish and support collaborative, integrated, population-sensitive community-based health care centers as the focus for delivering primary care, health promotion, and disease prevention.

Conduct needs assessments to determine the mix of providers and programs that is necessary for appropriate and comprehensive prevention and promotion and provide programs for recruiting and retaining professional health care providers.

Create financial and other incentives for health care providers, payers, employers, and consumers to encourage widespread disease prevention, health promotion, and early intervention.

Establish and deliver collaborative, integrated, population-sensitive educational programs to improve access to health care delivery, emphasize the importance of prevention, promote healthy lifestyles, and foster realistic outcome expectations.

Although each of these policy options for preventive care is judged to be extraordinarily important for the New Mexico health care system, the first two listed consistently scored the highest when the individual panelists ranked each policy option in comparison to the other three policy options according to three criteria:

Reasonable access -- opportunity for all New Mexicans to obtain basic health care services.

Affordable -- cost of health services must be reasonable in the aggregate as a component of the economy and the impact must be equitably shared by all stakeholders.

Quality -- effective and efficient use of health care technologies and services to advance overall wellness, including outcome research, benchmarking standards of care, and measurement protocols.

The panel identified nine action items related to the four policy options supporting the accomplishment of the overarching goal for the New Mexico health care system derived previously by the Policy/Information Working Group as follows:

To provide affordable health care with reasonable access and quality to all New Mexicans.
Introduction

The Health Care Task Force Advisory Group was appointed in mid-1993 by the Speaker of the New Mexico House of Representatives and the President Pro Tem of the New Mexico Senate to provide input and advice to the Health Care Task Force, a Joint Interim Legislative Committee of the New Mexico State Legislature. The Health Care Task Force, created by Laws 1993, Chapter 337, was charged to facilitate the development and implementation of a comprehensive health care delivery system for New Mexico and to report its findings and recommendations on access, availability, quality, and cost issues to the Legislature during the 1994 Legislative Session.

Three working groups, namely, the Policy/Information Working Group, the Programs/Education Working Group, and the Finance/Insurance Working Group, were formed to focus attention on major areas of concern to the Advisory Group. These working groups began their deliberations in August 1993 to articulate important health care issues.

Approach

Eight members of the Policy/Information Working Group, together with representatives from the Programs/Education Working Group, the New Mexico Department of Health, and the New Mexico Department of Human Services (see Attachment A) met on September 11, 1993, as a panel (see Attachment B) to identify and rank preventive care policy options. These policy options were to address the highest ranked desired outcome for the New Mexico health care system as determined by a prior panel consisting of members of the Policy/Information Working Group, namely:

Appropriate preventive care based on community education for wellness, with complete information and promotion of individual responsibility.

In order to accomplish these objectives in a systematic manner, the panel was charged (see Attachment C) to:

(1) identify and develop working definitions of preventive care policy options and
(2) prioritize the identified policy options according to a predetermined set of evaluation criteria.

A methodology developed by Sandia National Laboratories, known as the Vital Issues Process (see Attachment D), was employed in order to assist the panel in meeting its charge. This same procedure was used by the prior panel to identify and rank the seven desired outcomes for the New Mexico health care system.

**Stakeholder Perspectives**

To ensure that a breadth of stakeholder perspectives were injected into the discussions of candidate policy options, the panelists identified eight major categories of stakeholders. Included in this compilation are: health care providers, consumers of health care services, company providers of employee benefits, insurance companies, government, legal, health care technologists, and local communities. Health care providers were subdivided into three categories, namely, institutional, medical practitioners, and ancillary services; employers were separated into large and small companies; and government was broken into legislative and executive branches. Individual panelists were selected to represent one or more of the 12 perspectives during the discussions of candidate policy options.

**Preventive Care Desired Outcome**

Further definition of the scope of the policy options to be considered was obtained through a review of the preventive care desired outcome. Issues arising during this review discussion included the distinction between clinical preventive care or an individual focus and community services or an entire population focus; health insurance coverage of some aspects of preventive care, while other funding sources address more expansive items such as maintaining healthy environments; the importance of accident prevention; water fluoridation; community and domestic violence, public safety, and firearm policies; motor vehicle accidents, substance abuse and driving practices, motorcycle helmet laws, and motor vehicle seat belt policies; infectious disease management; indoor air quality; drinking water purification; and wastewater treatment and disposal.
Three distinct components of preventive care emerged from these discussions: prevention, promotion, and protection. Prevention and promotion were agreed to fall within the scope of the panel, while protection was excluded from topics receiving the attention of the panel. Suitable working definitions of these three components were acknowledged as having been developed in 1988 by the Governor's Health Policy Advisory Committee.*

**Identification of Candidate Policy Options**

By shifting the attention of the panel toward identifying policy options, 24 candidate policy options were developed. The discussion of these options was limited to exchanges among panelists to provide clarification and/or greater understanding of the policy option statement. Critical assessments of the policy options were deferred in order to maintain focus on the policy option identification process.

Upon review of these candidate policy options, with the objective of bringing greater structure to the panel deliberations, five broad themes became apparent. The specific policy options were categorized in accordance with these themes as follows:

*Educational programs -*

- Implement a statewide educational campaign on specifically identified preventable health care problems
- Implement community education regarding how to access different levels of health care delivery
- Integrate and coordinate public health, home care, hospice, attendant care, adult protective services, and long-term care with health promotion as the ultimate outcome
- Establish media guidelines for the promotion of healthy lifestyles
- Focus health education on defining health care in terms of outcome expectations

*As presented in* Health for the Future: A Proposed Policy for New Mexico, prevention refers to services, education, and/or other activities which are primarily focused on individuals and which prevent premature mortality and prevent or postpone the onset of acute disease, chronic disease, and disabling or other limiting conditions. Promotion is the science and art of helping people change their lifestyles and take greater personal responsibility to move toward a state of optimal health or wellness, including health consumer education to assist in appropriate health service utilization. Protection refers to those services, regulations, or other activities primarily directed at the community and overall society which protect citizens from unhealthy environmental conditions, from controllable infectious diseases and injuries, and from substandard health care.
• Review and revise medical curricula so all practitioners have a basic orientation toward prevention and promotion

• Improve the image of public health/primary care as a provider of choice

• Provide employers with basic, standardized, and appropriate health policy procedures and training

**Information and data -**

• Collect and store New Mexico health care data for longitudinal, demographic, and policy impact studies

• Use expert systems to identify individual and population health risks and to assist in the development of prevention strategies

• Provide adequate resources to appropriate agencies for needs assessments, including data collection, processing, and storage; policy development; and assurance of quality outcomes

• Establish appropriate benchmark data to measure performance improvement over time

• Develop a needs assessment for New Mexico to determine the kinds of health service providers that are necessary and to define the appropriate geographic placement of those providers throughout the state

• Institute programs and policies for the recruitment of the necessary health service providers identified by a statewide needs assessment in number and location

• Mandate public availability of information and data, including financial, relevant to health care

**Financial incentives**

• Establish financial incentives for health care providers to expand prevention efforts

• Establish financial incentives for individuals to seek the earliest and most appropriate health intervention available

• Provide financial incentives to employers that promote and implement wellness and worker safety programs

• Develop incentives for workplace safety in the event that the medical portion of workers' compensation is pooled into a general health care fund

**Health care clinics**

• Implement comprehensive women's reproductive health care statewide through school-based, private, and public clinics

• Mandate immunizations for preventable childhood diseases for children under the age of five

• Implement school-based health care centers in all communities
Non-traditional delivery systems -

- Provide adequate resources to establish local councils for organizing efforts toward healthy community development

- Encourage the development of prevention programs outside of conventional delivery systems

Condensed strawman policy option statements were derived for each of these five categories with the objective of capturing the intent of the specifically identified policy options, viz.:

- *Establish educational and promotional programs to improve access to health care delivery, broaden the appreciation of the importance of prevention programs, and encourage healthy lifestyles*

- *Collect, analyze, and make available information and data to support preventive health care practices*

- *Establish financial incentives for health care providers, employers, and consumers to encourage widespread prevention efforts*

- *Establish school-based, private, and public clinics to address women's reproductive health care and to provide immunization programs for childhood diseases*

- *Encourage non-traditional delivery systems for prevention programs, including the creation of local organizing councils*

Issues that arose during the discussion of the strawman policy option covering educational programs included the need to recognize cultural sensitivity, the importance of integration and coordination to improve quality and eliminate duplication, the desire to increase the emphasis on the importance of prevention, and the interest in not losing sight of realistic outcome expectations. As the panel struggled to factor these considerations into the strawman policy statement, agreed upon wording of a composite policy option emerged from the deliberations:

*Establish and deliver collaborative, integrated, population-sensitive educational programs to improve access to health care delivery, emphasize the importance of prevention, promote healthy lifestyles, and foster realistic outcome expectations.*

The appropriateness of the focus on information and data in contrast to needs assessments occupied the attention of the panel while discussing the information and data policy statement. After a lengthy exchange among the panelists, agreement was reached that the proper focus in the context of preventive care should be on needs assessments. Consistent with this understanding, three of the specific policy options forming the basis of this policy statement were
removed from further consideration under the subject of preventive care. This material was recommended to be forwarded as input to a subsequent panel addressing information systems. These three policy options concerned collection and storage of health care data, establishment of benchmark data for performance measurements, and public access to health care information. Expert systems, as identified in one of the specific policy options, were discussed in some detail in an effort to properly incorporate the potential of this technological advance in health care delivery systems. The panel appreciated the importance of expert systems in evaluating complex sets of risk factors as a means to help practitioners identify appropriate prevention and/or treatment strategies, especially in health care clinics in rural communities with limited access to highly trained personnel. In order not to disregard this feature of advanced preventive care systems, the concept of expert systems was reclassified into the health care clinics strawman policy statement. The remaining three specific policy options addressing needs assessments were reformulated into a single policy option, namely:

*Conduct needs assessments to determine the mix of providers and programs that is necessary for appropriate and comprehensive prevention and promotion and provide programs for recruiting and retaining professional health care providers.*

The importance of early intervention as well as health promotion was stressed by the panelists during the discussion of the financial incentives policy statement. Other considerations addressed the merits of explicitly including individual practitioners and/or a reference to public health as categories of providers. Agreement was reached on revised wording as follows:

*Create financial and other incentives for health care providers, payers, employers, and consumers to encourage widespread disease prevention, health promotion, and early intervention.*

Considerable concern was expressed by the panelists regarding the apparent specific focus on women's reproductive health care and children's immunization programs instead of a broader emphasis on prevention programs in the health care clinics policy statement. Similarly, the relative merits of and resources available to school-based, private, and public clinics were discussed at length. Widespread consensus was reached on the need to emphasize the responsibility of individual communities in taking action. The panelists agreed that any
successful health care system must include community-based health care centers as the focus for primary care, health promotion, and disease prevention programs. Building on this agreement, the panel further discussed the relative merits of adopting a general policy option statement versus incorporating subordinate clauses to provide greater definition or, perhaps, even including specific examples like school-based centers, women's reproductive health care, or immunization programs as expressed in the strawman statement. Some panelists voiced concerns about a potential shift in orientation from policies to programs and from actions to concepts. In order to bring these discussions to closure, the panel produced a significantly revised policy option, viz.:

*Establish and support collaborative, integrated, population-sensitive community-based health care centers as the focus for delivering primary care, health promotion, and disease prevention.*

Upon reviewing the strawman policy statement on non-traditional delivery systems and the two specific policy options from which this statement was generated, the panel concluded that the fifth separate policy option was unnecessary. The concept of local councils was judged to be embodied in community-based health care centers. Conversely, the desire to establish prevention programs outside of conventional delivery systems perhaps had not been captured adequately in the policy option focused on needs assessments. Several panelists voiced a concern that genuine preventive care programs were too often recast as primary care procedures in order to qualify for reimbursement under many health care plans. This practice unnecessarily complicates the delivery of both preventive and primary care and may, in some instances, discourage individuals from seeking appropriate preventive care resulting in a need for expensive primary care at a later date. To conclude this discussion, the panel agreed to not revise any of the policy options to better capture this concept and to defer further discussion of this topic to a future panel.

In each case, these preventive care policy options were judged by the panel to be necessary for any New Mexico health care system. Following the agreement on the specific language of these four policy options addressing education, needs assessments, incentives, and community-based health care centers, the panel reviewed the 24 specifically identified policy options to ensure that each one was encompassed in the four consensus policy options, except for the three
addressing information and data needs not specific to preventive care. No significant omissions were found.

**Ranking of Policy Options**

The Vital Issues Process employs a paired-comparison procedure requiring individual members of the panel to privately assess the relative importance of each policy option according to a single criterion compared to each of the other policy options for that same criterion. This process is repeated until paired comparisons are made in a similar manner for all criteria. To translate these assessments into quantitative scores, the following numerical scale is used: much more important = 5; more important = 4; equally important = 3; less important = 2; and much less important = 1.

Prior to scoring individual policy options, one member of the panel champions or markets the policy option to the remainder of the panel in the context of the evaluation criteria. A second member of the panel is assigned the role of making counterpoints to this presentation. This exchange is followed by a discussion and further elaboration of any related issues by the complete panel. A set of special scoring sheets is provided to facilitate the recording of numerical scores for subsequent analysis. In this manner, a relative ranking of the policy options, along with numerical scores assigned to each policy option, are obtained simultaneously.

**Evaluation Criteria**

Three evaluation criteria developed by the Policy/Information Working Group as part of an earlier Vital Issues Panel were used for making paired comparisons across the four derived policy options as follows:

*Reasonable access -- opportunity for all New Mexicans to obtain basic health care services.*

*Affordable -- cost of health services must be reasonable in the aggregate as a component of the economy and the impact must be equitably shared by all stakeholders.*

*Quality -- effective and efficient use of health care technologies and services to advance overall wellness, including outcome research, benchmarking standards of care, and measurement protocols.*
Point-Counterpoint Discussions

For ease of reference, the four policy options were assigned abbreviated titles as follows:

- education;
- needs assessments;
- incentives; and
- community-based health centers.

Each policy option was discussed in detail in advance of scoring that option in comparison to the other three policy options. Individual panelists played their assigned role of a particular stakeholder in contributing to the discussions.

The advantages of promoting early and open access to the health care system, focusing on individuals who are not sick, utilizing existing physical facilities, capitalizing on the multitude of media outlets for educational programs as well as employing advanced information technologies, and responding to most individual's motivation to learn about health were pointed out during the discussions on the education policy option. Because information is readily available, the assembly and packaging of appropriate materials should be modest in cost, thereby holding out the potential of obtaining high paybacks on the required expenditures. Conversely, concerns were expressed by some panelists regarding the present overburdened condition of the educational system, the difficulty of achieving a balanced presentation especially on topics with moral and/or religious overtones, the apparent lack of funding sources for development and distribution of the necessary educational materials, and the challenges in measuring programmatic impacts.

Opportunities to link educational and incentives programs; develop health risk profiles using inexpensive and, possibly, free software packages; and focus on educational support for health care decision making surfaced during the deliberations.

Identification of population baseline information and provider mix data are two important components of needs assessments. The dichotomy between patient needs defining provider requirements or providers seeking patients was raised as a challenge to needs assessments. Widespread agreement was voiced by the panelists on the desirability of needs assessments, but
some panelists expressed caution regarding who defines a need, the difficulty in designing objective tools for performing needs assessments, and the requirement to carefully consider demographics in a state as diverse as New Mexico. Credible needs assessments in New Mexico were recognized to require a strong geographical component. Merging needs assessment data with a suitable geographic information system should be able to address this concern adequately. Other issues such as information accessibility, accountability, funding sources, minimum standards of needs, ability to support difficult decisions, and the tendency to create needs rather than assess needs were specific topics mentioned by the panelists.

Topics that arose during the discussions of the incentives policy option included the potential of incentives to lower the overall cost of health care by shifting the balance from later stage care to early intervention, the influence of reimbursement policies of health care payers on current preventive care efforts, the opportunity to broaden access to the health care system through preventive treatments, the importance of non-financial incentives in shaping future health care systems, and the tendency of past policies to serve as disincentives to preventive care. Panelists observed the potential benefits of making preventive care more affordable to employers, adequately rewarding providers for adopting a preventive care orientation, allowing preventive care leave to not deduct from sick leave allocations, spreading incentives to rural areas, and enhanced preventive care resulting in lower health insurance premiums. Improperly designed incentives, as noted by some panelists, could negatively impact liability and malpractice considerations, encourage prevention programs unable to result in immediate cost savings, distort the flow of funds in the health care system, or could unintentionally introduce unfairness into the health care system.

Strong support for community-based health centers emerged from the discussions. The desirability of grass roots involvement, ownership, and pride in a local health care delivery system obtained, in part, through cost sharing by communities was widely shared among the panelists. One concern is, however, that community expectations may exceed the ability to pay, which could, in turn, impact accessibility. The opportunities for community-based health care
centers to support rural economic development initiatives, results to be measured against computer-based standards, capitalizing on existing physical and human resources, addressing needs specific to the community, and developing collaborative efforts were judged to be important considerations. Community-based health centers could also support the grass roots development of statewide health care policies through, for example, the establishment of health councils linked to local school districts.

**Numerical Results**

The quantitative analysis of the paired comparisons performed by each panelist produced the following ranking of the four policy options, in descending order, according to the criterion of reasonable access:

- *community-based health care centers;*
- *needs assessments;*
- *education; and*
- *incentives.*

When judged by the affordable criterion, the relative ranking of the policy options assigned by the members of the panel is, in descending order:

- *incentives;*
- *community-based health care centers;*
- *needs assessments; and*
- *education.*

For the quality criterion, the panel ranked the policy options in descending order as follows:

- *education;*
- *needs assessments (tie);*
- *community-based health care centers (tie); and*
- *incentives.*

A graphical summary of the quantitative results for the reasonable access criterion compared to the quantitative results for the affordable criterion is shown in Figure 1. Policy options plotted
Figure 1. Summary of the numerical ranking of policy options related to preventive care for the New Mexico health care system according to the reasonable access and affordable criteria. For any policy option, the length of the horizontal axis of the ellipse represents the level of disagreement among the individual members of the panel on the affordable criterion, while the length of the vertical axis of the ellipse corresponds to the level of disagreement among the individual members of the panel on the reasonable access criterion. Disagreement among the panelists on the affordable criterion is illustrated by the horizontal width of the ellipse signifying a given policy option, while disagreement among the panelists on the reasonable access criterion is shown by the vertical height of the ellipse. Greater disagreement corresponds to longer distances (e.g., the greatest disagreement on the importance of a policy option for the reasonable access criterion occurred for the highest ranked policy option of community-based health care centers).
Figures 2 and 3 compare the quantitative results for the reasonable access and quality criteria and the affordable and quality criteria, respectively. Interestingly, when evaluated by each of the three criteria, community-based health care centers consistently ranked among the most important policy options, but simultaneously exhibited one of the highest levels of disagreement (compare Figures 1, 2, and 3).

Figure 2. Summary of the numerical ranking of policy options related to preventive care for the New Mexico health care system according to the reasonable access and quality criteria. For any policy option, the length of the horizontal axis of the ellipse represents the level of disagreement among the individual members of the panel on the quality criterion, while the length of the vertical axis of the ellipse corresponds to the level of disagreement among the individual members of the panel on the reasonable access criterion.

**Action Items**

During the course of the discussions on and ranking of policy options, nine specific recommended action items emerged. Two action items were associated with each of the policy
Figure 3. Summary of the numerical ranking of policy options related to preventive care for the New Mexico health care system according to the affordable and quality criteria. For any policy option, the length of the horizontal axis of the ellipse represents the level of disagreement among the individual members of the panel on the quality criterion, while the length of the vertical axis of the ellipse corresponds to the level of disagreement among the individual members of the panel on the affordable criterion.

options, while one action item was not aligned closely with any specific policy option as follows:

Community-Based Health Care Centers -

- Allocate public funds to the establishment of community-based health care centers for health promotion and disease prevention
- Require all medical practitioners receiving education and training in state-supported institutions to gain practical experience in community-based health care centers

Needs Assessments -

- Allocate public funds to a statewide, integrated needs assessment for comprehensive disease prevention and health promotion programs
- Mandate public access to needs assessment information while protecting legitimate confidentiality requirements
Incentives -

- Provide financial incentives (tax credits) for medical providers and/or employers for qualified expenditures on wellness programs and activities
- Establish financial incentives (tax credits) for certified providers of preventive care services in rural areas

Education -

- Mandate health education programs at all levels in the public school system
- Require advertisers of alcohol and tobacco products to spend a fixed percentage of all advertising expenditures in New Mexico on health education programs

Other -

- Mandate immunization programs for children at the earliest practical age between zero and five

Concluding Remarks

The panel made up of members of the Policy/Information and Programs/Education Working Groups of the Health Care Task Force Advisory Group, the New Mexico Department of Health, and the New Mexico Department of Human Services effectively met the charge of identifying and developing working definitions of preventive care policy options. In addition, the panel generated nine specific action items in support of the four policy options designed to help achieve the overarching goal for the New Mexico health care system articulated by the Policy/Information Working Group, namely:

To provide affordable health care with reasonable access and quality to all New Mexicans.
Attachment A

Panelists

Marianne Bennett
Albuquerque

Larry Bridge
Albuquerque

Mary Lou Coors
Albuquerque

Jim Hall
Los Alamos

Larry Martinez
Santa Fe

Tony Montoya
Albuquerque

Marah Moore
Albuquerque

Facilitator
Dennis Engi
Sandia National Laboratories
Albuquerque

Barbara Elder Owens
Silver City

Tex Ritterbush
Albuquerque

John Romero
Albuquerque

Arlene Roth
Albuquerque

Howard Shaver
Albuquerque

Julia White
Albuquerque

Rapporteur
Larry Iceman
Iceman & Associates
Santa Fe
AGENDA

Health Care Task Force Advisory Group
Policy/Information Working Group
Preventive Care Desired Outcome Workshop
Coronado Club
Albuquerque, New Mexico
September 11, 1993

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<td>Welcome</td>
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<td>Introductions and Overview of the Process</td>
<td>Dennis Engi</td>
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<td>Identification of Stakeholder Representation</td>
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<td>10:00 am</td>
<td>Preventive Care Desired Outcome Revisited</td>
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<td>Discussion of the Coalesced List of Policy Options</td>
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New Mexico Health Care System Preventive Care Vital Issues Panel

Sample promotion of a policy option in the context of the evaluation criteria

Preventive Care Desired Outcome

Appropriate preventive care based on community education for wellness, with complete information and promotion of individual responsibility

Strawman Policy Option

Implement school-based health care centers in all unserved rural communities

Evaluation Considerations

Reasonable access
- basic health care services directly available to students
- linkages to community-wide health care needs

Affordable
- low-cost opportunity to utilize existing infrastructure
- community involvement, participation, and expense sharing
- early investment in youth health pays a lifetime of dividends

Quality
- effective and efficient use of technology and services
- proven method to advance overall youth and family wellness
- compatible with health care standards and protocols
The Vital Issues process is a strategic planning tool which identifies a portfolio of programmatic activities (an ‘investment portfolio’) for an organization, aimed at satisfying its high-level goals and objectives. The process requires a high level of stakeholder involvement, thus predisposing acceptance of the programmatic endeavors by those stakeholder communities.

The Vital Issues process is a multi-stage process, involving a series of day-long, intensive workshops, each of which builds on the results of the previous. The first workshop focuses on definitions, identifying target goals and objectives, describing the type of issues or problems addressed by the sponsoring organization, and identifying criteria for issue or problem selection. The next workshop (or set of workshops) uses the selection criteria and the definition of the desired issue or problem to identify and rank a set of such issues. The following workshop (or set of workshops) selects one of those identified issues (probably but not necessarily the highest ranked) and identifies and ranks associated programmatic activities. Subsequent workshops (or sets of workshops) can focus on tasks associated with specific programmatic activities. The process is illustrated in figure 1.

As group dynamics constrain the effective size of a panel to no more than twelve participants (with an optimal size of eight to ten), it is possible to run parallel panels on the same topic if the number of stakeholder or constituency groups is greater than twelve. In such a case, representatives from the topical panels should be brought together into a 'composite' panel to generate integration of the results of the separate panels. This is illustrated in figure 2.

The panel of participants in each workshop will differ, as expertise will be relevant to the topic at hand. Institutional perspectives key to organizational success (such as private sector, state/federal government, and academe) should be identified a priori and represented on each panel. Each panel also should reflect a broad range of stakeholder communities. Individual panelists should be selected for their expertise and credibility within their professional communities.
The Vital Issues process incorporates two primary approaches: a qualitative, or transactional method, which takes a synthetic approach, and a quantitative, or net benefit maximization method, which performs some analytic activities. The transactional method involves dialogue among individuals or groups with some stake in the sponsoring organization's activities. Such dialogue usually focuses on problem or issue definition (which can include definition of an organization's goals and objectives) and criteria for measuring success through problem solution or goal achievement. Participation in the construction, or synthesis, of those definitions allows participants to become invested in the process. The definitions constructed by these synthetic activities form the environment within which a set of alternatives (such as issues or programs) can be identified. Net benefit maximization uses quantitative methods to perform a cost/benefit analysis on a set given alternatives, seeking to identify the alternative that provides the greatest social (or organizational) good according to some set of criteria.

Both methods are applied in each workshop of the Vital Issues process. The agenda begins with a discussion of the topical area with which the workshop is charged, seeking to construct a definition that satisfies the group and which sets the parameters within which the specific issues, activities, or tasks are identified. A set of criteria for measuring success are also identified. Group discussion clarifies the identified issues and leads to consensus on their definition and scope. The issues are then relatively ranked (that is, the items in the set are ranked against each other, and not against any external, absolute standard) using pairwise comparisons which compares each issue to all others in the set in turn against each of the identified selection criteria by asking the scorer to assign specific values to each issue. This forces panelists to make explicit the tradeoff process and the criteria by which they are making the tradeoffs. The process is illustrated in figure 3.

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Executive Summary

Policy options for the New Mexico health care system were established by a panel consisting of members of the Policy/Information and Finance/Insurance Working Groups of the Health Care Task Force Advisory Group to the Health Care Task Force, a Joint Interim Committee of the New Mexico Legislature, and representatives of the State of New Mexico. These policy options are designed to help achieve the information systems desired outcome for the New Mexico health care system established previously by the Policy/Information Working Group, viz.:

Efficient, technologically current, user-friendly management information and data collection system in order to improve the health policy and decision-making capacity of public and private organizations and individuals.

The information systems policy options identified by the panel are:

- Adopt regulations and/or legislation requiring the use of a technologically based process to define standardized data sets needed for proper analysis of New Mexico health care needs and outcomes.

- Develop, implement, and appropriately finance a health information system architecture, hardware, and software capable of providing primary data and analytic results such as needs assessments, benchmarking, and outcomes.

- Develop, implement, and support the maintenance of an appropriately funded, integrated, state health information system to provide information pertaining to those health factors referenced in Section 24-14A-3 of the Health Information System Act of 1989; patient outcomes; provider and payer performance; waste, fraud, and abuse; epidemiology; and any other mandated data.

- Phase in the collection of sensitive information and the release of non-aggregate data on health care providers as the security, integrity, and accuracy of the state health information system are proven.

- Provide incentives to develop and maintain community-based medical records with maximum protection of individual privacy and autonomy.

The first three policy options were combined into one for the purpose of ranking each of these extraordinarily important information systems policy options. This composite policy option uniformly received the highest rank, while also exhibiting the greatest level of agreement, when the individual panelists scored each policy option against the other two using three criteria:

- Reasonable access -- opportunity for all New Mexicans to obtain basic health care services.

- Affordable -- cost of health services must be reasonable in the aggregate as a component of the economy and the impact must be equitably shared by all stakeholders.

- Quality -- effective and efficient use of health care technologies and services to advance overall wellness, including outcome research, benchmarking standards of care, and measurement protocols.

The panel identified eight action items related to the five policy options supporting the accomplishment of the overarching goal for the New Mexico health care system derived previously by the Policy/Information Working Group as follows:

- To provide affordable health care with reasonable access and quality to all New Mexicans.
Introduction

The Health Care Task Force Advisory Group was appointed in mid-1993 by the Speaker of the New Mexico House of Representatives and the President Pro Tem of the New Mexico Senate to provide input and advice to the Health Care Task Force, a Joint Interim Legislative Committee of the New Mexico State Legislature. The Health Care Task Force, created by Laws 1993, Chapter 337, was charged to facilitate the development and implementation of a comprehensive health care delivery system for New Mexico and to report its findings and recommendations on access, availability, quality, and cost issues to the Legislature during the 1994 Legislative Session.

Three working groups, namely, the Policy/Information Working Group, the Programs/Education Working Group, and the Finance/Insurance Working Group, were formed to focus attention on major areas of concern to the Advisory Group. These working groups began their deliberations in August 1993 to articulate important health care issues.

Approach

Eleven members of the Policy/Information Working Group, together with representatives from the Finance/Insurance Working Group, the New Mexico Health Policy Commission, and the New Mexico Department of Human Services (see Attachment A) met on September 16, 1993, as a panel (see Attachment B) to identify and rank information systems policy options. These policy options were to address a highly ranked desired outcome for the New Mexico health care system that was particularly well-suited to the topical focus of the Policy/Information Working Group as determined by a prior panel, namely:

*Improvement in the health policy and decision-making capacity of public and private organizations and individuals through creation of an efficient, technologically current, user-friendly management information and data collection system.*

In order to accomplish these objectives in a systematic manner, the panel was charged to:

1. identify and develop working definitions of information systems policy options and
2. prioritize the identified policy options according to a predetermined set of evaluation criteria.
Input in the form of candidate policy options abstracted from the deliberations of a panel addressing the preventive care desired outcome was provided to the panel (see Attachment C). A methodology developed by Sandia National Laboratories, known as the Vital Issues Process (see Attachment D), was employed in order to assist the panel in meeting its charge. This same procedure was used by a prior panel to identify and rank the seven desired outcomes for the New Mexico health care system.

**Stakeholder Perspectives**

To ensure that a breadth of stakeholder perspectives were injected into the discussions of candidate policy options, the panelists identified nine major categories of stakeholders. The process of selecting a final list of representative stakeholders generated considerable discussion regarding the inclusion of media and community perspectives. While the media could be considered as a separate stakeholder, the impact and influence of the media is of a different nature than and is reflective of the perspectives held by the other identified stakeholders. Consequently, the panel reached a consensus on excluding media from the list of stakeholders. Likewise, some panelists felt community perspectives were adequately covered by other agreed upon stakeholders and that community represented a higher order stakeholder. Other panelists countered with the observation that community includes grass roots perspectives as well as individuals who do not participate regularly in the health care system and so might not fall within one of the other identified groups. However, when community was expanded to incorporate the concept of public good, the panel readily agreed to include community as a separate stakeholder perspective.

The final consensus group of stakeholders included: health care providers, consumers of health care services, company providers of employee benefits, insurance companies, state government, local government, legal, health care technologists, and local communities. Health care providers were subdivided into three categories, namely, institutional, medical practitioners, and ancillary services; employers were separated into large and small companies; and state government was broken into legislative and executive branches. Individual panelists were
selected to represent one or more of the 13 perspectives during the discussions of candidate policy options.

**Information Systems Desired Outcome**

Further definition of the scope of the policy options to be considered was achieved by reviewing the information systems desired outcome. This discussion focused on the challenge of defining workable policies leading to the establishment of appropriate information systems capable of capturing and presenting the information needed to serve as a foundation for the adoption of other policies of importance to the New Mexico health care system. A revision of the information systems desired outcome, placing greater emphasis on important characteristics of a desirable system than the original wording, was agreed upon as follows:

*Efficient, technologically current, user-friendly management information and data collection system in order to improve the health policy and decision-making capacity of public and private organizations and individuals.*

**Identification of Candidate Policy Options**

Twenty-one candidate policy options were identified by the panel. Initial discussion of these options was limited to exchanges among panelists to provide clarification and/or greater understanding of the policy option statement. Critical assessments of the policy options were deferred in order to maintain focus on the policy option identification process. Upon review of these candidate policy options, with the objective of bringing greater structure to the panel deliberations, four distinct categories emerged.

Sixteen specific policy options were assigned to these categories with five policy options being classified into a miscellaneous category as follows:

*Data sets* -

- Establish a standardized data set of health care information collected from health care providers allowing accurate and equal comparisons of provider performance

- Draft legislation and/or regulations defining the data requirements for proper analysis of New Mexico health care needs and outcomes related to health status, health care outcomes, health and preventive care services utilization, and health and preventive care costs
• Mandate the utilization of a technologically based process for determining standardized data sets

**System architecture -**

• Provide state-financed hardware and software to all licensed institutional providers in order to enable rapid and accurate input of data required by regulations

• Create both static (information storage formats) and dynamic (information flows between entities of health care enterprises) information architectures upon which to base implementation of a health information system

• Support the development and maintenance of an integrated state health information system in a neutral agency with accounting, modeling, and forecasting capabilities integrating financial, epidemiologic, geographic, needs assessment, and outcomes data

• Make funds available to public and private groups, including institutional and community-based health care providers, for the purpose of conducting research to determine outcomes related to health care, health care status, health delivery systems, and health costs

• Develop a comprehensive geographic information system for analysis and presentation of health status, morbidity, socioeconomic, statewide health care infrastructure, and health system data

**Data collection -**

• Charge the New Mexico Department of Health with the responsibility to collect and make available a baseline of health information and annual trends through accessible, user-friendly computer centers at all public libraries and schools

• Include home care information as a data set in any information management system to be established

• Define and mandate the use of standardized reporting of data sets by all payers and providers of health care services

• Provide for data collection pertaining to potential conflicts of interest among providers, payers, and patients and develop a system to analyze the data for financially driven abuses

• Establish appropriate benchmark data to measure performance improvement over time

**Sensitive information -**

• Phase in the collection of sensitive information as the security and integrity of the health information system are proven

• Provide substantial penalties for unauthorized public release of personal health status data

• Phase in the release of non-aggregate data on health care providers once the validity and accuracy of the data collection and analysis processes have been verified
Miscellaneous -

- Develop a centralized billing system through which all providers of health care services will be reimbursed
- Mandate utilization of a common claim form as the input device needed to establish data set fields
- Provide incentives to develop and maintain community-based medical records with maximum protection of individual privacy and autonomy
- Require all health-related state agencies to use the same geographic districts and personal financial qualifications or other criteria to make services at the community level more readily accessible
- Recommend full support of the New Mexico Health Care Task Force for the implementation of the Health Information System Act of 1989

While developing these policy options, the panel recognized the need in many instances for coordination with the New Mexico Health Policy Commission (HPC). In two areas, geographic information and standardized billing systems, coordination with the HPC efforts to develop a comprehensive health information system were judged to be particularly important.

Several questions were raised by panelists related to the uses and users of data supporting needs assessments. The panel concluded that the data requirements for needs assessments are incorporated adequately in the description of data sets, thereby invalidating a suggestion to single out information supporting needs assessments as a separate policy option statement.

Strawman policy option statements were derived for the categories of data sets, system architecture, data collection, and sensitive information with the objective of capturing the intent of each of the individually identified policy options, viz.:

- Develop a rigorous methodology to define the data needed to support the health information system
- Develop and implement a health information system architecture, hardware, and software addressing both static and dynamic dimensions which will provide primary data and analytic results such as needs assessments, benchmarking, and outcomes
- Collect the primary data needed to support the health information system in areas including, but not limited to, provider performance, payer performance, home health care, health status, morbidity, socioeconomic parameters, health care services utilization, health care costs, epidemiology, and any other mandated data
- Provide substantial penalties for the unauthorized collection or release of sensitive data
A critical review of the strawman policy option addressing data sets spawned an extensive discussion of the advantages and disadvantages of citing specific data set examples. Some panelists felt such a list would effectively indicate the breadth of the necessary, or perhaps desired, primary information set. To the contrary, others warned of the restrictive nature of such lists and the risk of inadvertently omitting a particularly important item. Nevertheless, the panel proceeded in an effort to develop an appropriately structured list. These discussions became increasingly complex and circular. Secondarily, the focus on developing a methodology in contrast to defining the required data sets was questioned. An emphasis on action was encouraged by some panelists. Consensus on an action orientation and on emphasizing data set definition was obtained readily. On the other hand, agreement on the inclusion of specific examples remained elusive, ultimately leading the panel to drop this issue and to reconsider this topic under the discussion on the data collection strawman policy option statement. This approach allowed the panel to agree on the following revised policy option for data sets:

*Adopt regulations and/or legislation requiring the use of a technologically based process to define standardized data sets needed for proper analysis of New Mexico health care needs and outcomes.*

The challenge of financing the creation of a health information system designed to capture data beyond those collected by providers in the normal course of business dominated the discussion of the system architecture strawman policy statement. This consideration is of special importance to small and independent health care providers. Other issues discussed included the extensive data presently collected and available; the incompatibility of existing information systems; jurisdictional conflicts impeding the flow of data between federal and state programs; shortcomings of the Health Information System Act by allowing funding of the system on an as-resources-permit basis; the release of only aggregate data, thereby precluding contributions to intelligent right-buy decisions for consumers; the current omission of patient satisfaction and quality outcome information; and appropriate locations for housing the health information system. This latter issue was deferred to the discussion on the strawman policy option under the
data collection category. In recognition of the importance of adequate financing, the panel reached a consensus on revised wording as follows:

*Develop, implement, and appropriately finance a health information system architecture, hardware, and software capable of providing primary data and analytic results such as needs assessments, benchmarking, and outcomes.*

Upon reviewing the strawman data collection policy option statement in the context of the revised policy options for data sets and system architecture, a strong consensus emerged among the panelists for an implementation-oriented policy statement. Three major issues were discussed extensively: funding, timing, and location. The panel did not feel sufficiently well informed to make a firm recommendation on the necessary funding level. Likewise, the panel struggled in an attempt to establish an implementation timetable. Weak agreement emerged for a one- to two-year period, but the panel was unable to adopt a specific time period for having a fully operating health information system. During these deliberations, several panelists noted that the timetables established in 1989 by the Health Information System Act, ranging from eight to 21 months, were not met, in part, due to insufficient funding. The issue of the appropriate location for the health information system was not resolved. A variety of alternatives were discussed ranging from a neutral agency, to an organization with interests and responsibilities across the full spectrum of health care, to a policy-oriented entity such as the Health Policy Commission. Given the fragmented responsibilities of various the health-related agencies in New Mexico, the panel was unable to reach agreement on a specific location for the health information system.

Several suggested revisions to the strawman policy option statement were proposed and analyzed. Eventually consensus was reached on combining the essence of the specific policy option concerned with system maintenance and location that was judged to not have been adequately incorporated into the system architecture policy option with the list of sample data requirements developed during the deliberations on the data sets policy option statement, viz.:

*Develop, implement, and support the maintenance of an appropriately funded, integrated, state health information system to provide information pertaining to those health factors referenced in Section 24-14A-3 of the Health Information System Act of 1989; patient outcomes; provider and payer performance; waste, fraud, and abuse; epidemiology; and any other mandated data.*
To emphasize the requirement for and challenge of obtaining sufficient financing, the panel inserted the phrase appropriately funded in the consensus policy option addressing data collection.

Concern was expressed by the panelists regarding the omission of important concepts articulated in the specific policy options included in the category of sensitive information in the strawman policy option statement. In addition, a more positive emphasis on the collection and appropriate release of sensitive information was preferred by the panelists instead of the focus on penalties for inappropriate use of data present in the strawman statement. By combining the two specific policy options initially generated by the panel, agreed upon wording of a composite policy option surfaced from the discussions:

*Phase in the collection of sensitive information and the release of non-aggregate data on health care providers as the security, integrity, and accuracy of the state health information system are proven.*

After reaching agreement on the language of these four policy options addressing data sets, system architecture, data collection, and sensitive information, the panel considered the five specific policy options that were left uncategorized. The last two policy options requiring greater standardization among health care agencies and recommending support for implementation of the Health Information System Act were judged by the panel to be adequately addressed by the revised policy option on data collection.

Centralized billing and the adoption of a common claim form triggered lengthy discussions. Some panelists noted that often billing practices in New Mexico are not amenable to centralized billing, several others felt that linking data collection to centralized billing would ensure access to data for the health information system, while others expressed concern about the inherent inefficiency of a centralized billing system. Some confusion also was present regarding the respective objectives of centralized versus standardized billing systems. Agreement was reached to not explicitly address centralized billing systems from a policy perspective because the information collection aspects of this concept were adequately embodied in the policy options covering data sets, system architecture, and data collection. Common claim forms were judged to
be more of an efficiency issue than a topic appropriate for information systems policies. However, upon omitting this topic as a policy option, the panel noted the importance of adopting a common claim form for the New Mexico health care system and urged that this issue be addressed appropriately elsewhere.

The remaining uncategorized specific policy option addressing community-based medical records was judged to not be adequately addressed by the four consensus policy options. Issues discussed in this regard included patient confidentiality, the potential advantages of information systems based on individual patients rather than providers, and the revolutionary aspects of record keeping on an individual patient basis. While individual patient records do not form the basis of state health information systems in the U.S., this approach is utilized by the U.S. armed forces worldwide. Following these discussions and observations, the panel adopted the specific policy option as originally stated:

*Provide incentives to develop and maintain community-based medical records with maximum protection of individual privacy and autonomy.*

Having completed the identification of five consensus policy options, concerns were again raised regarding financial resources and implementation timetables. Intelligent resource allocations in an environment of severely limited funds, as is expected in New Mexico, are critical to the successful implementation of a functional statewide health information system. Consistent with available funds, the panel unanimously urged that a workable system, designed for easy expansion, be designed, installed, and made operational as soon as possible. A specific timetable was judged to be essentially meaningless without reasonable knowledge of the financial resources to be dedicated over the next several years to establishing a health information system to meet the needs of the New Mexico health care system and in the absence of expert advice on the personnel effort required to develop such an information system.

During a final review of the five policy options, several panelists suggested that the policy options for data sets, system architecture, and data collection actually represented three distinct phases of a continuous process to establish a health information system in New Mexico. As such,
the panel concluded that these options should be packaged into a single policy option when being evaluated in comparison to the remaining two policy options. For ease of reference, this composite policy option and the other two policy options were assigned abbreviated titles:

- data definition;
- sensitive information; and
- records.

**Ranking of Policy Options**

The Vital Issues Process employs a paired-comparison procedure requiring individual members of the panel to privately assess the relative importance of each policy option according to a single criterion compared to each of the other policy options for that same criterion. This process is repeated until paired comparisons are made in a similar manner for all criteria. To translate these assessments into quantitative scores, the following numerical scale is used: much more important = 5; more important = 4; equally important = 3; less important = 2; and much less important = 1.

Prior to scoring individual policy options, one member of the panel champions or markets the policy option to the remainder of the panel in the context of the evaluation criteria. A second member of the panel is assigned the role of making counterpoints to this presentation. This exchange is followed by a discussion and further elaboration of any related issues by the complete panel. A set of special scoring sheets is provided to facilitate the recording of numerical scores for subsequent analysis. In this manner, a relative ranking of the policy options, along with average numerical scores assigned to each policy option and a measure of the disagreement among panelists with respect to the average score, are obtained simultaneously.

**Evaluation Criteria**

Three evaluation criteria developed by the Policy/Information Working Group as part of an earlier Vital Issues Panel were used for making paired comparisons. These criteria are:

*Reasonable access -- opportunity for all New Mexicans to obtain basic health care services.*
Affordable -- cost of health services must be reasonable in the aggregate as a component of the economy and the impact must be equitably shared by all stakeholders.

Quality -- effective and efficient use of health care technologies and services to advance overall wellness, including outcome research, benchmarking standards of care, and measurement protocols.

Point-Counterpoint Discussions

Each policy option was discussed in detail in advance of scoring that option in comparison to the other two policy options. Individual panelists played their assigned role of a particular stakeholder in contributing to the discussions. The three policy options covered the areas of data definition, sensitive information, and records.

The discussions on the data definition policy option weighed the advantages of enhancing health care access and improving the delivery of health care services against the potential disadvantages of expanded paperwork requirements and intrusions on patient confidentiality. Specifically, a well-designed health information system could be an enabler of a number of practices including telemedicine, rural general practitioners-conferring with urban specialists, outcomes analyses, decision support for referrals, patient history availability resulting in more cost effective health care delivery, and patients becoming better informed consumers of health care services. Increased costs and who will pay were expressed as major concerns by several panelists, as well as the possibility of resources being diverted from the delivery of health care to finance the maintenance of the health information system.

Widespread agreement was present among the panelists on the basic attractiveness of useful information contributing to consumer and provider awareness, as well as to more informed decision making at all levels of the health care system. Some panelists questioned the ability of an information system to truly perform up to these expectations. The ability of macro-level data to reflect quality of care delivered by individual providers; the tendency of systems to become too complex; the need to institute appropriate penalties for non-compliance in reporting; the desire for the system to support policy making; the magnitude of the effort required to actually develop and implement a workable system; the possible intimidation of individuals without
adequate computer literacy; and the potential for shifting financial burdens to local, especially rural, communities occupied the attention of the panel during the deliberations. Strong, continuous financial commitments will be required to build and maintain a high-quality system. Allocation of the necessary funds in a state with low per capita income and large numbers of uninsured citizens, such as New Mexico, will be a significant challenge. The locus of responsibility for purchasing and maintaining the system hardware and software remains an unresolved issue. This situation is especially troubling for small providers and sole practitioners.

Issues related to patient confidentiality dominated the discussions on the sensitive information policy option. Data accuracy is a key consideration because unreliable information may lead to mistaken conclusions, thereby undermining quality, and could be worse than the present lack of information. Data collection should, therefore, await verification that information can be collected accurately. Panelists observed the opportunity to manage costs and make procedural modifications during the phasing in of the system, the challenge of maintaining multiple levels of sensitivity while keeping the system user-friendly, and the need to develop a high level of patient trust in the process. Concerns surfacing during the discussions included potential cost increases associated with handling sensitive information, possible implementation delays resulting from excessive focus on sensitivity considerations, the emphasis on protection of individual confidentiality compromising the overall data collection process, the imbalance between protection of patient and provider information, and skewed results based on the nature of the patient population served by certain providers. These latter two points are likely to encourage opposition from practitioners, hospitals, and/or insurance companies providing care to a disproportionate share of the sickest of the sick patients, which inevitably leads to poorer outcome records.

Treading on the privacy rights of providers in order to allow consumers to become better informed will be an inherent cost and will require acceptance of a significant departure from past practices in the health care system. While this situation may be threatening to some providers, some panelists acknowledged irreversible trends in this direction nationwide. The deliberations
highlighted the need to clearly define sensitive information and the possibility of stimulating legal challenges, especially if penalties are imposed for failure to participate and/or for unauthorized releases.

Strong support was voiced for the concept of community-based medical records; however, reducing this concept to practice will require careful handling of a variety of controversial issues. Both access and quality should be enhanced through adoption of a system of this type. Reductions in duplication of services and maintenance of splintered medical records could also be achieved. Community-based medical records can be particularly important under a health care system based on managed competition. Health care quality monitoring, measures of health status, and historical outcome reviews could be facilitated by a system in which medical records travel with individual patients. Denials of insurance coverage based on pre-existing conditions could possibly increase by allowing insurers access to medical records. Several operational concerns were expressed by the panel including the failure by patients to bring records to practitioners, the lack of technology capable of fully supporting a community-based electronic medical records system, the possibility of patients altering medical documents or records, the need for practitioners to use double entry bookkeeping in order to generate backup records as a safeguard, and the security risks inherent in storing highly sensitive non-aggregated data at a single site.

Patient confidentiality, system security, and acceptable costs were recognized as major challenges to a community-based medical records system utilizing current technology. Systems with acceptable operational characteristics would be extremely expensive even for partial implementation. Some panelists noted that prototype standards and systems are under development by the Computer-Based Patient Records Institute and the Microelectronics and Computer Technology Corporation and are scheduled to be tested at a limited number of sites in the U.S. One panelist pointed out that work in this area has been ongoing since 1965 without producing a workable system. A second panelist doubted the feasibility of a system addressing topics much beyond immunization records or recent medical prescriptions. The current legal and medical malpractice climate in the U.S. makes giving access to medical information to patients,
while precluding medical providers from maintaining possession of patient records, an extraordinary challenge. The intermediate technology of smart cards arose as part of the discussion. Many panelists endorsed the concept of smart cards. Loss of cards, failure to make cards available when seeking medical care, and inadequate controls on transferability were cited as possible drawbacks.

**Numerical Results**

The quantitative analysis of the paired comparisons performed by each panelist produced the following ranking of the three policy options, in descending order, according to each of the three criteria of reasonable access, affordable, and quality:

- *data definition;*
- *sensitive information;* and
- *records.*

A graphical summary of the quantitative results for the reasonable access criterion compared to the quantitative results for the affordable criterion is shown in Figure 1. Policy options plotted upward and to the right are judged to be the most important (e.g., data definition received the highest average score from the panelists of 4.3 for the reasonable access criterion, as well as the highest average score of 4.4 on the affordable criterion in Figure 1). Disagreement among the panelists on the affordable criterion is illustrated by the horizontal width of the ellipse signifying a given policy option, while disagreement among the panelists on the reasonable access criterion is shown by the vertical height of the ellipse. Greater disagreement corresponds to longer distances (e.g., the greatest disagreement on the importance of a policy option for the reasonable access criterion occurred for the lowest ranked policy option of records).

Figures 2 and 3 compare the quantitative results for the reasonable access and quality criteria and the affordable and quality criteria, respectively. Interestingly, when evaluated by each of the three criteria, data definition consistently dominated the rankings, while simultaneously exhibiting the smallest disagreement among the scores assigned by individual panelists (compare Figures 1, 2, and 3).
Figure 1. Summary of the numerical ranking of policy options related to information systems for the New Mexico health care system according to the reasonable access and affordable criteria. For any policy option, the length of the horizontal axis of the ellipse represents the level of disagreement among the individual members of the panel on the affordable criterion, while the length of the vertical axis of the ellipse corresponds to the level of disagreement among the individual members of the panel on the reasonable access criterion.

**Action Items**

Eight specific recommended action items surfaced during the discussions of the policy options. Four of these action items were associated with the data definition policy option, while one action item was aligned with each of the other two policy options. Two additional action items were not directly associated with any specific policy option. The action items include:

*Data Definition -*

- Collect, analyze, and make available information and data to support preventive health care practices and to facilitate the establishment of appropriate benchmark data to measure performance improvement over time

- Establish and maintain a systematic approach to the collection and storage of New Mexico health care data for longitudinal, demographic, and policy impact studies
Figure 2. Summary of the numerical ranking of policy options related to information systems for the New Mexico health care system according to the reasonable access and quality criteria. For any policy option, the length of the horizontal axis of the ellipse represents the level of disagreement among the individual members of the panel on the quality criterion, while the length of the vertical axis of the ellipse corresponds to the level of disagreement among the individual members of the panel on the reasonable access criterion.

- Utilize expert-system-based protocols in health care centers in rural communities to identify individual and population health risk profiles and to assist in the delivery of primary and preventive health care services

- Develop a comprehensive geographic information system for presentation and analysis of health status, morbidity, socioeconomic, environmental, and health system data

Sensitive Information -

- Mandate public availability of non-sensitive information and data relevant to health care, including financial information

Records -

- Implement substantial penalties for the unauthorized public release of personal health status data
Figure 3. Summary of the numerical ranking of policy options related to information systems for the New Mexico health care system according to the affordable and quality criteria. For any policy option, the length of the horizontal axis of the ellipse represents the level of disagreement among the individual members of the panel on the quality criterion, while the length of the vertical axis of the ellipse corresponds to the level of disagreement among the individual members of the panel on the affordable criterion.

Other -

- **Mandate utilization of a common claim form for health care providers and payers conducting business in New Mexico**
- **Develop a standardized billing system to reimburse all providers of health care services**

**Concluding Remarks**

The panel made up of members of the Policy/Information and Finance/Insurance Working Groups of the Health Care Task Force Advisory Group, the New Mexico Health Policy Commission, and the New Mexico Department of Human Services effectively met the charge of
identifying and developing working definitions of information systems policy options. In addition, the panel generated eight specific action items in support of the five policy options designed to help achieve the overarching goal for the New Mexico health care system articulated previously by the Policy/Information Working Group, namely:

To provide affordable health care with reasonable access and quality to all New Mexicans.

Major unresolved issues include the identification of the source of funds for purchases of state-of-the-art hardware and software to form the foundation of a functional statewide health information system; the establishment of an ambitious, but achievable, timetable for implementing the system; and the preparation of a defensible cost estimate, consistent with any adopted installation schedule.
Attachment A

Panelists

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# AGENDA

Health Care Task Force Advisory Group  
Policy/Information Working Group  
Information Systems Desired Outcome Workshop  
Lovelace Medical Center  
Albuquerque, New Mexico  
September 16, 1993

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Principal Discussants(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 am</td>
<td>Welcome</td>
<td>Tex Ritterbush</td>
</tr>
<tr>
<td>9:15 am</td>
<td>Introductions and Overview of the Process</td>
<td>Dennis Engi</td>
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<tr>
<td>9:45 am</td>
<td>Identification of Stakeholder Representation</td>
<td>All (facilitated by Engi)</td>
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<tr>
<td>10:00 am</td>
<td>Information Systems Desired Outcome Revisited</td>
<td>All (facilitated by Engi)</td>
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<tr>
<td>10:30 am</td>
<td>Break</td>
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<tr>
<td>10:45 am</td>
<td>Identification of Policy Options</td>
<td>All (facilitated by Engi)</td>
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<tr>
<td>12:00 noon</td>
<td>Catered Lunch</td>
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<tr>
<td>1:00 pm</td>
<td>Discussion of the Coalesced List of Policy Options</td>
<td>All (facilitated by Engi)</td>
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<tr>
<td>2:00 pm</td>
<td>Break</td>
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<tr>
<td>2:15 pm</td>
<td>Explanation of the Ranking Process</td>
<td>Dennis Engi</td>
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<tr>
<td>2:30 pm</td>
<td>Ranking of Policy Options</td>
<td>All (facilitated by Engi)</td>
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<tr>
<td>3:30 pm</td>
<td>Break</td>
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</tr>
<tr>
<td>3:45 pm</td>
<td>Ranking of Policy Options</td>
<td>All (facilitated by Engi)</td>
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<tr>
<td>5:00 pm</td>
<td>Summary and Close</td>
<td>Tex Ritterbush</td>
</tr>
<tr>
<td>5:15 pm</td>
<td>Adjourn</td>
<td></td>
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</tbody>
</table>
Attachment C

New Mexico Health Care System Information Systems Vital Issues Panel

Candidate policy options identified by a panel addressing the preventive care desired outcome for consideration by the information systems panel

Information Systems Desired Outcome

Improvement in the health policy and decision-making capacity of public and private organizations and individuals through creation of an efficient, technologically current, user-friendly management information and data collection system

Candidate Policy Options (Abstracted from the Preventive Care Panel)

- Establish and maintain within the Human Services Department a systematic approach to the collection and storage of New Mexico health care data for longitudinal, demographic, and policy impact studies
- Develop and install expert system based protocols in health care centers in rural communities to identify individual and population health risk profiles and to assist in the delivery of primary and preventive health care services
- Develop a comprehensive geographic information system for presentation and analysis of health status, morbidity, socioeconomic, environmental, and health system data
Identifying Strategic Opportunities: New Strategies for a New World

The Vital Issues Process

**Process Purpose**

The Vital Issues process is a strategic planning tool which identifies a portfolio of programmatic activities (an 'investment portfolio') for an organization, aimed at satisfying its high-level goals and objectives. The process requires a high level of stakeholder involvement, thus predisposing acceptance of the programmatic endeavors by those stakeholder communities.

**Process Description**

The Vital Issues process is a multi-stage process, involving a series of day-long, intensive workshops, each of which builds on the results of the previous. The first workshop focuses on definitions, identifying target goals and objectives, describing the type of issues or problems addressed by the sponsoring organization, and identifying criteria for issue or problem selection. The next workshop (or set of workshops) uses the selection criteria and the definition of the desired issue or problem to identify and rank a set of such issues. The following workshop (or set of workshops) selects one of those identified issues (probably but not necessarily the highest ranked) and identifies and ranks associated programmatic activities. Subsequent workshops (or sets of workshops) can focus on tasks associated with specific programmatic activities. The process is illustrated in figure 1.

As group dynamics constrain the effective size of a panel to no more than twelve participants (with an optimal size of eight to ten), it is possible to run parallel panels on the same topic if the number of stakeholder or constituency groups is greater than twelve. In such a case, representatives from the topical panels should be brought together into a 'composite' panel to generate integration of the results of the separate panels. This is illustrated in figure 2.

The panel of participants in each workshop will differ, as expertise will be relevant to the topic at hand. Institutional perspectives key to organizational success (such as private sector, state/federal government, and academia) should be identified a priori and represented on each panel. Each panel also should reflect a broad range of stakeholder communities. Individual panelists should be selected for their expertise and credibility within their professional communities.

![Figure 1](image-url)
The Vital Issues process incorporates two primary approaches: a qualitative, or transactional method, which takes a synthetic approach, and a quantitative, or net benefit maximization method, which performs some analytic activities. The transactional method involves dialogue among individuals or groups with some stake in the sponsoring organization’s activities. Such dialogue usually focuses on problem or issue definition (which can include definition of an organization’s goals and objectives) and criteria for measuring success through problem solution or goal achievement. Participation in the construction, or synthesis, of those definitions allows participants to become invested in the process. The definitions constructed by these synthetic activities form the environment within which a set of alternatives (such as issues or programs) can be identified. Net benefit maximization uses quantitative methods to perform a cost/benefit analysis on a set given alternatives, seeking to identify the alternative that provides the greatest social (or organizational) good according to some set of criteria.

Both methods are applied in each workshop of the Vital Issues process. The agenda leads off with a discussion of the topical area with which the workshop is charged, seeking to construct a definition that satisfies the group and which sets the parameters within which the specific issues, activities, or tasks are identified. A set of criteria for measuring success are also identified. Group discussion clarifies the identified issues and leads to consensus on their definition and scope. The issues are then relatively ranked (that is, the items in the set are ranked against each other, and not against any external, absolute standard) using pairwise comparisons which compares each issue to all others in the set in turn against each of the identified selection criterion by asking the scorer to assign specific values to each issue. This forces panelists to make explicit the tradeoff process and the criteria by which they are making the tradeoffs. The process is illustrated in figure 3.
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