



**BlueCross & BlueShield  
United of Wisconsin**

An independent licensee of the Blue  
Cross and Blue Shield Association

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March 1, 2000

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Re: **Response to February 24, 2000 Request**

Dear Steven:

In response to paragraph number 2 in your letter dated February 24, 2000, I am enclosing the minutes of the September 29, 1999 Board of Directors meeting. As those minutes reflect, the Board of Directors approved the plan of the two medical schools at that meeting.

In regards to paragraph number 1, we are currently gathering the requested information. I hope to provide you all the requested information by March 10.

Finally, in regard to the issue of the name of the Foundation, I intend to provide you an answer before March 10.

Sincerely,

Stephen E. Bablitch

SEB/lh  
Junior letter 3-1-2000

**BOARD OF DIRECTORS MEETING  
BLUE CROSS & BLUE SHIELD UNITED OF WISCONSIN  
September 29, 1999**

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A telephonic meeting of the Board of Directors of the Blue Cross & Blue Shield United of Wisconsin ("Blue Cross"), a Wisconsin corporation was held at the office of the corporation located at 401 West Michigan Street; Milwaukee, Wisconsin, beginning at 8:00 a.m. on Wednesday, September 29, 1999 pursuant to a notice properly given in accordance with the Bylaws and the law.

The following Directors were present:

Thomas A. Bausch	Donald P. Muench
James L. Forbes	D. Keith Ness
Thomas R. Hefty	Janet D. Steiger
James C. Hickman	Kenneth M. Viste
Michael S. Joyce	

Also present were Stephen Bablitch, Tim Cullen, Gail Hanson and Thomas Luljak. Joseph R. Branch of Foley & Lardner was also in attendance.

Mr. Hefty, Chairman and CEO, presided at the meeting; and Mr. Bablitch acted as Secretary.

**MEDICAL COLLEGE OF WISCONSIN AND UNIVERSITY OF WISCONSIN  
MEDICAL SCHOOL PROPOSALS**

Mr. Hefty presented the suggested final proposal from the Medical College of Wisconsin and the University of Wisconsin Medical School, a copy of which is attached hereto as Exhibits A and made a part of these minutes. The Board commented that the diversity among the reports was complementary, but the Medical College of Wisconsin's annual report should be as detailed as the University of Wisconsin Medical School's. The Board expressed concern regarding the assumptions made by both institutions regarding the receipt of funds from the Blue Cross Foundation. Mr. Hefty indicated that Blue Cross' expectations regarding changes to the proposal and distribution of funds would be clearly conveyed to both institutions.

In response to Mr. Forbes' question, Ms. Hanson reported that Blue Cross cannot take advantage of a charitable contribution deduction at this time due to the lack of taxable income. Ms. Hanson further reported that management is exploring possible

deductions; however, it is unlikely that the contribution of the stock of a Blue Cross Holding Company to a foundation will qualify for an income tax deduction. Ms. Steiger questioned whether accounting by the two institutions will indicate where the funds originated and if Medical College of Wisconsin is allowed to refer to the fund as the Blue Cross Endowment Fund as shown in the proposal. Mr. Bablitch indicated that the institutions cannot create a fund using the Blue Cross name, but they can note in their reporting that the funds originated from the Blue Cross charitable contribution. Upon motion duly made, seconded and carried, the final proposal attached as Exhibit A was unanimously approved with noted changes

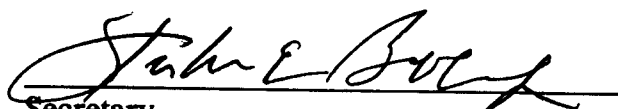
#### FOUNDATION BOARD MEMBERS

Mr. Hefty presented and reviewed a list of recommended Foundation Board members, a copy of which is attached hereto as Exhibit B and made a part of these minutes. Mr. Hefty noted that the list includes recommendations from the Medical College of Wisconsin, the University of Wisconsin Medical School, and the Blue Cross Special Committee. Dr. Viste expressed his concerns regarding the lack of hospital or physician representation. Upon motion duly made, seconded and carried, the list of recommended Foundation Board members attached as Exhibit B was unanimously approved.

At Ms. Steiger's request, Mr. Bablitch presented a preliminary timetable for the conversion process and reported that the Insurance Commissioner would like to complete work on the conversion by February 1, 2000. Mr. Bablitch indicated that a final proposal of the Medical School's report with the Blue Cross Board of Directors' approval should be presented to the Commissioner by October to ensure that public hearings begin in November.

There being no further business to come before the Blue Cross Board of Directors, upon motion duly made, seconded and carried, the meeting was adjourned at 8:45 a.m.

  
Chairman and Chief Executive Officer

  
Secretary

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# Advancing the Health of Wisconsin's Population

*Through Excellence in  
Medical Education, Research  
and Community Service*

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A Plan Submitted to the Board of Directors of  
Blue Cross & Blue Shield United of Wisconsin  
by The Medical College of Wisconsin  
and The University of Wisconsin Medical School

September 27, 1999

**DRAFT**

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## FOREWORD

*For generations, the Medical College of Wisconsin and the University of Wisconsin Medical School have served as health resources for the people of Wisconsin. Through medical education, research, clinical care and community service, our schools have educated the state's physicians and other health professionals. The schools have taken pioneering research from their laboratories into the daily lives of those who have needed health care, and they have partnered with organizations, large and small, in urban and rural communities to improve the public's health. As the two schools have advanced, so has the health of the citizenry. The medical schools are well known for their educational and research accomplishments, and they have always recognized the direct link between what they do and the health of the public, especially the link between medical research and health. Indeed, today Wisconsin is ranked third in the nation in "quality of health care," according to the Health Risk Management index, a state-by-state benchmark. This ranking speaks exceptionally well for the two institutions that educate two-thirds of the physicians who practice in our state. Our schools are indeed statewide resources.*

*Now we have the prospect of an empowering and transforming gift to the two schools from Blue Cross & Blue Shield United of Wisconsin. This ~~is a~~ gift, to be endowed and preserved in perpetuity, ~~which~~ will ensure and broaden the mandate of the schools. It will give depth and resonance to the schools' missions in the new millennium. There are virtually no other organizations where the impact of such a gift will be so far-reaching, so comprehensive and so*

able to improve the health of our citizens. We are at an historic crossroads and our direction has been defined by who we are and how well we have traveled through the century we are now concluding. Our fellow travelers, the people of Wisconsin, have benefited from our strengths and commitment to their well being. Our capacity for the future is bright because we are to be uniquely and permanently strengthened through the gift of Blue Cross & Blue Shield United of Wisconsin. This gift has already given us a glimpse of the years ahead by bringing the two medical schools into a deeper partnership, a partnership shared with the citizens of this state.

Both schools are at the forefront of the future of medicine. Yesterday, health care was about curing the sick. Today's most compelling research is about understanding diseases so that we can effect better cures. Tomorrow, the great advances in health care and medical research will be mostly about prevention. This gift will propel the implementation of tomorrow's vision. The public health crossroads in 1900 were posted with stark signposts: life and death. These remain our ultimate realities, but hope has entered our vocabulary and the signage of the new century will clearly be prevention and effective intervention. In the future, people will not question the "why" and the "how of this gift; rather, they will thank recent history and the people who wrote it for making Wisconsin first in what matters most -- the quality of health.



## I. INTRODUCTION

On June 3, 1999, Blue Cross & Blue Shield United of Wisconsin announced its intention to convert to a for-profit corporation and to establish a foundation dedicated to improving the public's health with the proceeds from that conversion. Wisely, the firm has chosen the state's two medical schools, the Medical College of Wisconsin (MCW) and the University of Wisconsin Medical School (UW Medical School), as the vehicles through which to achieve this goal. While other existing or new organizations could be used for this purpose, none are as comprehensive or as well equipped as our two institutions with appropriate administrative structures in place, and many clinicians and researchers, educational programs and statewide affiliations. ~~were designated as the principal beneficiaries of the new foundation. This document has been prepared in response to the request by Blue Cross & Blue Shield United of Wisconsin for a plan to use these resources.~~

We wish to begin by thanking the Board of Directors of Blue Cross & Blue Shield United of Wisconsin for their thoughtful decision to select Wisconsin's two medical schools as the leadership organizations for translating the conversion-related gift into a healthier Wisconsin. MCW and the UW Medical School have the expertise, experience and commitment to be effective stewards of this gift. By their very nature, medical schools are forward looking. We focus not only on today's health concerns, but also on tomorrow's needs. This dual perspective appropriately allows us to balance programs addressing today's problems with prevention, research and education initiatives that will reduce future needs for health care.

Both medical schools are nationally recognized. They share values and have a unity of purpose in their balanced fourfold missions of education, research, patient care and community service. These values are reflected in the current strategic plans of both schools. Moreover, the schools have productive collaborations and ~~community partnerships with clinical providers, community and statewide organizations, health advocacy groups, and other educational and research institutions in a number of complementary program areas,~~ benefiting the citizens of the state. These partnerships developed throughout the state will allow the schools to identify collaborative opportunities and move quickly to implementation. We will not need to expend valuable Blue Cross & Blue Shield funds to support additional bureaucracies. Our administrative structures are in place and functioning well. This was evidenced by our ability to rapidly and effectively implement the statewide assessment of health care concerns and priorities needed to develop this plan. Indeed, no other state with multiple medical schools enjoys relationships better than those developed by MCW and the UW Medical School.

The depth and complexity of Wisconsin's health care needs can appear overwhelming. Our two medical schools are perhaps the only existing entities which can adequately address this complexity. Our missions of patient care, education, research and community service reflect that very complexity. We understand that good health is dependent on access to an excellent health care system. For us, that translates into the need for better information and public education efforts, improved understanding of the barriers to healthy life styles and the role that genetics plays in good health, research into the causes, prevention and treatment of disease, and to providing a well-educated health care workforce for the state of Wisconsin.

With the dramatic restructuring of health care over the past decade and the increasing health problems facing our communities, there has been growing recognition of the need for greater collaboration between medical schools and their communities. MCW faculty members have strengthened their academic efforts with interdisciplinary community-based initiatives in southeastern Wisconsin and throughout the state. The UW Medical School has reaffirmed its role as a statewide medical school with a growing interest in population and community health – one of the six program priorities identified in its 1998-2000 Strategic Plan. The two medical schools have the ability to reach the state's entire population and advance a healthier Wisconsin by excelling at their established missions of medical education, research and community service. This gift will build upon the strengths of the two schools, thereby advancing leadership in partnership-building among academic medicine, health care professionals and local communities. Partnerships – the strengthening of these mutually beneficial community relationships – were strongly emphasized by the public at the recent statewide listening sessions.

The programs presented in the schools' plans are designed to make the greatest difference on the most serious health care issues we face. They address the diseases that kill or disable the greatest number of people in our state, the populations that are least likely to have access to good health care, and those health professionals who are charged with ensuring that all our citizens get the health care they need. The transformation we anticipate will be seen in many ways. The public health workforce will be enhanced. Consumer education will become more widespread. Diseases will be prevented or at least detected in earlier stages when they are more treatable. The quality of the public's health will not simply increase in "pockets," but will be more evenly distributed across the state.

Because the needs are great and are spread throughout the state, each institution will address these issues from its unique position. MCW is located in Milwaukee, Wisconsin's major metropolitan center while the UW Medical School has taken to heart the University's Wisconsin Idea and focuses strongly on rural health as well as urban problems. Together, we are able to collaborate and focus on the specialties each of us has developed within the more general health needs addressed in this document.

~~The following plans describe offer a broad outline of how the two schools propose to use the Blue Cross & Blue Shield United of Wisconsin's funds. Once our plans receive initial endorsement, we will proceed to develop specific initiatives which respond to the areas described in this report the ideas more fully. Our programs propose to improve Wisconsin's health by addressing those areas such as heart disease, cancer and Alzheimer's that most often affect the longevity and quality of life of Wisconsin's citizens. The funds will allow us to increase prevention and treatment efforts. In addition, the conversion funds will provide an opportunity to address the specific public health issues identified through the public comment process, such as the need for improved public health education and the desire for increased community partnerships to address local needs.~~

This document should be viewed as dynamic, with the understanding that although Wisconsin ranks high among states in quality of health care, its needs are still great. While \$250 million is a large and generous gift, even this sum will not address every need. Our plans, therefore,

necessarily focus on those areas where we can have the greatest impact within our existing missions.

## **II. ASSESSING HEALTH CONCERNS AND PRIORITIES: PROCESS AND RESULTS**

Following the announcement of plans to create this new public health foundation, Wisconsin's two medical schools organized a comprehensive assessment of the health status and needs of the state's diverse population using a threefold approach. Our objective was to identify current priorities that can potentially be addressed by medical school initiatives designed to improve the public's health throughout Wisconsin in the 21<sup>st</sup> century. The three components of the assessment are summarized below, and presented in Chart 1. In addition, a detailed description of the process and results will be found in Appendix A.

- A. Multiple Opportunities for Public Comment:** Listening sessions (public hearings) were held at nine sites, both urban and rural locations throughout Wisconsin. These sessions were well attended by more than 500 people, with approximately 200 individuals providing oral testimony on health concerns and priorities. President T. Michael Bolger of MCW and Dean Philip Farrell of the UW Medical School were present at all sessions to hear these "Wisconsin voices." More than 500 additional comments were received from individuals via e-mail, a toll free phone number and US mail.
- B. Survey of a Random Sample of Wisconsin's Population:** We contracted with the St. Norbert College Survey Center, which is unaffiliated with either medical school, to conduct a random survey on public perceptions of the state's health care needs and priorities and recommendations for use of the Blue Cross & Blue Shield funds. This random survey of 451 Wisconsin adults, aged 18 and older, allowed us to ascertain the opinions of a representative cross-section of the citizens of the state who might otherwise not respond to our request for comments.
- C. Analysis of Existing Data on Health Status and Needs:** Considerable federal, state and local health care data are available and were gathered and reviewed. This information complements the more subjective data gathered through the first two approaches and adds the regional perspective systematically. In addition, we also reviewed the progress of the Department of Health and Family Service's "Turning Point" initiative. One outcome of this project will be a model for setting statewide health and systems priorities. When this model becomes available at the end of the year, it should prove to be a continuing resource for identifying future health needs.

## **Chart 1**

### **Assessment of Wisconsin's Health Needs and Priorities July 6 - August 3, 1999**

#### **Listening Sessions (Public Hearings)**

- Stevens Point - 7/6/99
- DePere - 7/6/99
- Woodruff - 7/9/99
- Superior - 7/9/99
- Janesville/Beloit - 7/14/99
- Madison - 7/14/99
- Milwaukee - 7/15/99
- La Crosse - 7/16/99
- Menomonie - 7/16/99

#### **Toll Free Phone Number (voice mail)**

#### **E-Mail**

#### **US Mail**

#### **Additional Sources of Public Comment**

- Briefing for Legislators - 7/7/99
- Meeting with Great Lakes Intertribal Council - 7/19/99
- Wisconsin Public Radio Call-In Show - 7/19/99
- Random Survey of 451 Wisconsin Residents - 7/17/99 to 7/29/99
- Analysis of Existing Data and Reports
  - Mortality and Morbidity Data
  - Community Needs Assessments
  - Population Health Check-Up
- Recommendations from MCW and UW Faculty

**C. Citizens' Concerns About Health Priorities:** This July 1999 assessment provided us with a greatly enhanced understanding of the long term challenges associated with "advancing a healthier Wisconsin." We believe that this has been the most intensive statewide assessment of population health needs and priorities ever conducted in Wisconsin. It combined a greatly appreciated, interpersonal element with more traditional, scientifically valid methodologies. The proposed gift of Blue Cross & Blue Shield, therefore, has already been beneficial for the state and its two medical schools. The following section summarizes our findings. A more detailed report on the assessment process and its results will appear in a special issue of the *Wisconsin Medical Journal* to be published this fall.

In their comments, the citizens of Wisconsin identified a variety of health-related issues. Although Wisconsin has a relatively healthy population, the State clearly has many health needs which citizens feel are not being fully addressed.

- A number of health-related themes were repeated, although there appeared to be no public consensus regarding top priorities.<sup>1</sup> Specific diseases/population health needs were mentioned most frequently, although the area of concern varied. Women's health issues were frequently identified, along with cancer, cardiovascular disease, mental health (excluding AODA), aging issues (Alzheimer's), Diabetes Mellitus, and infant & childhood diseases.
- Support for research to eradicate disease and the promotion of expanded community-based clinical research trials were strongly advocated. There was also strong interest in prevention and wellness activities, including behavior modification and fitness and nutrition programs.
- Concern was expressed over the financing of public health initiatives and the need to help communities meet identified public health needs.
- A number of individuals also commented on the difficulties of accessing care, both for uninsured and underserved individuals, and those living in urban and rural underserved communities. Expanded support for the education and training of health professionals was urged, along with the building of collaborative relationships between K-12 school systems, colleges & universities and community health providers.

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<sup>1</sup> Public responses may be somewhat skewed, due to the organized efforts of various special interest groups. We are aware that some organizations asked their national/international members to respond to our requests for public input. While we deleted all out-of-state comments where possible, many e-mail addresses do not identify the state/country of origin. In addition, those using voice mail messages did not always identify themselves or their place of residence, so it was not possible to eliminate all potential duplicate or out-of-state messages.

- In addition, several process issues were identified by the public. A number of comments expressed a desire for the schools to preserve the principal by creating an endowment. The importance of collaborating with communities and existing organizations working on health care issues was also stressed.
- During this public process, concerns regarding the overall Blue Cross & Blue Shield United of Wisconsin conversion process were expressed. We asked individuals to forward concerns of this type directly to Blue Cross & Blue Shield.
- There are considerable existing data from scientific studies on the health status and needs of Wisconsin's population. The conclusions to be drawn from this data are somewhat similar, but not identical, to citizen comments about disease and illness.
  - The leading causes of death in Wisconsin are cardiovascular diseases and cancer.
    - Cardiovascular diseases account for 40 percent of all deaths in Wisconsin. If all cardiovascular diseases were eliminated, individual life expectancy would increase by nearly 10 years.
    - Cancer, the second most prevalent cause of death in Wisconsin, accounts for 20 percent of all deaths.
    - Stroke is the third leading cause of death. While most common among the elderly, 28 percent of stroke victims are under age 65.
    - Wisconsin exceeded the national death rate for Alzheimer's in 1997. The GAO has projected a 50 percent increase in the number of Alzheimer's patients by 2015.
    - Health care needs and concerns vary by age, gender, race and ethnicity, and place of residence. Examples of leading health problems by age and prevention strategies appear in Chart 2.

### **III. VISION OF THE 21ST CENTURY**

As we approach the 21<sup>st</sup> century, the state and its two medical schools are faced with both challenges and opportunities. The 20<sup>th</sup> century has brought major health advances and developments nationwide that no one could have predicted, like the eradication of polio, an infectious disease, and the emergence of new health challenges such as AIDS. The next century will assuredly do the same. While we are unable to predict with certainty what will happen, we are able to foresee certain emerging health and related trends which will undoubtedly hold major significance for all health providers including our two schools. These trends are reflected both directly and indirectly in many of the comments we received from the public. They also have implications for how we can best improve health in the future. Specifically, these trends include:

**Chart 2**

**A Healthy Life Span for Wisconsin Citizens  
Summary of Health Problems and Preventive Strategies**

<b>Age Group</b>	<b>Leading Health Issues</b>	<b>Prevention Strategies</b>
<b>Infants &lt;1 year</b>	<b>Congenital anomalies, SIDS Low birth weight</b>	<b>Prenatal care Healthy mothers</b>
<b>Children, Ages 1-14</b>	<b>Injuries, primarily motor vehicle crashes Child abuse and neglect</b>	<b>Immunization and well child care Developing lifelong healthy habits</b>
<b>Adolescents/young adults, Ages 15-24</b>	<b>Motor vehicle crashes Homicide, suicide Tobacco and alcohol use; sexual behavior</b>	<b>Developing lifelong healthy habits</b>
<b>Adults, Ages 25-64</b>	<b>Cancer Heart disease Diabetes Depression</b>	<b>Screening and disease management Providing accurate health information</b>
<b>Older adults ages 65+</b>	<b>Heart disease and stroke Cancer Disability and social isolation Depression</b>	<b>Screening and disease management Rehabilitation Quality long-term care Palliative care</b>
<b>All ages</b>	<b>Premature deaths and disability Health disparities by income, education, or race</b>	<b>Health promotion and education Policies to promote safe products, environments, and lifestyles Access to low-cost, high quality health care</b>

- **Changing demographics will result in an older population. Projections indicate that by the year 2025, the segment of the population 65 and older will increase by 50 percent. Diseases associated with aging, such as Alzheimer's and cancer, will likely become more prevalent. In addition, the population will become more ethnically diverse. With a larger minority population, there will be an increasing need to expand efforts to address the health concerns of these groups.**
- **Research into the causes, prevention and treatment of disease and disability will gain increasing emphasis and generate new opportunities to advance health.**
- **The field of genetic research will greatly expand our knowledge of the body and how it functions. This knowledge will increase our ability to prevent many diseases. However, many diseases are a combination of environmental, behavioral and genetic factors. Consequently, additional research will be needed on how people live and the lifestyles they embrace.**
- **New research discoveries will make more illnesses preventable. In some cases, prevention will require lifestyle changes which are relatively inexpensive, but difficult for individuals to accomplish. In other cases, cutting edge procedures, which are complex and expensive, may be required (for example, gene therapy).**
- **There will be greater emphasis on "translational" research, hastening the application of laboratory discoveries into clinical practice.**
- **Additional health research on major population groups will be needed to provide a framework for public policy changes that could prevent and/or alleviate certain medical conditions.**
- **Technology-driven health care will remain important and expensive. While people may be able to stay healthier longer, they will eventually succumb to a variety of illnesses and disabilities.**
- **Medical school curricula and continuing medical education will be modified to reflect a greater emphasis on health promotion and disease prevention. Medical practitioners will be better prepared to collaborate with their patients on lifestyle changes that produce improved health.**
- **Distance education, including teleconferencing, will become increasingly important in educating health professions students and maintaining the skills and knowledge of health care practitioners.**
- **Information technology will profoundly increase the health care resources and information available to consumers and health care providers.**
- **Expanded interdisciplinary collaborations between academic and community partners will be necessary to address the challenges of improving health in the next century.**



The 21<sup>st</sup> century will be a century of change and discovery, yet the essential reality of human suffering due to health-related problems will surely persist. The two medical schools, rooted in a history of responsiveness, fueled by new resources and statewide partnerships, will be there to help.

#### IV. PRINCIPLES FOR STEWARDSHIP

Moving from analysis of data, comment and trends, the two medical schools have begun to outline strategies for the use of the funds. As an initial step, we established a set of guiding principles to govern the stewardship of the gift from Blue Cross & Blue Shield United of Wisconsin. These principles include:

- *Thoughtful prioritization.* Aim for maximum impact to improve the health status of the people of Wisconsin. This will require a prioritization of initiatives which have the greatest potential to significantly improve health in Wisconsin.
- *Build on strength.* Emphasize initiatives that most effectively build on the programmatic strengths and strategic priorities of the medical schools.
- *Create leveraged partnerships.* Leverage these gift funds by pooling resources. Both schools have active well-funded research programs and successful fund raising initiatives, thereby providing potential for increasing the level of funding available for the activities described in the remainder of the plan.
- *Prevention through research.* Emphasize activities, including research, which seek to prevent disease, injury and disability. Activities or initiatives should also be responsive to public and community health needs and priorities.
- *Collaboration.* Emphasize community collaborations to broaden program impact throughout the state.
- *The greater good.* Emphasize potential to impact on large segments of the population or multiple regions of the state.
- *Outcomes research.* Assure effectiveness through monitoring of program outcomes.

The underlying credibility and reputation of the two schools leverages the entire enterprise. The gift enhances literally every relationship within the schools, creating wider day-to-day impact.

#### V. OVERVIEW OF PLAN FOR USING THE BLUE CROSS & BLUE SHIELD GIFT

With priorities and principles clearly articulated, the schools then proceeded to develop separate but collaborative plans to maximize the impact of the foundation dollars while gaining from each

**institution's unique strength. We have emphasized those health priorities we are best able to address within our current missions, with a particular focus on community outreach. The plans represent our current strategic vision to advance the health of Wisconsin's population. They will serve as guides, recognizing that we work in a dynamic environment and must be flexible to achieve the goal of improved health status for the people of the state. Our strategies and objectives must be periodically re-examined in relation to changes in the health needs of Wisconsin's populations, technology, research development and other factors. Specific implementation timelines will be developed as the details of the Blue Cross & Blue Shield United of Wisconsin conversion process and the timing of the distribution of the gift become known. Development of implementation specifics will also require involvement by the faculty of both institutions.**

**In broad terms, the schools plan to use the Blue Cross & Blue Shield gift as follows:**

- Endowment funds will be created. The majority of the gift to each school, currently valued at an estimated \$125 million a piece, will be placed in endowments to support programs serving goals for a healthier population. Both medical schools are committed to creating a long-term sustainable impact so that future generations will also benefit from this gift. An endowment, appropriately invested, is expected to provide approximately \$5-\$7 million (1999 dollars) annually per institution. To retain the original worth of the endowment, a portion of the total return will be reinvested each year with the principal to maintain value and hedge against inflation.**
- Medical research into the major causes of death and disability in Wisconsin will be expanded.**
- An increased emphasis will be placed on prevention and wellness activities.**
- Improved health in rural and urban underserved areas will be targeted with strengthened community linkages.**
- Translational research, which hastens the application of discoveries from the laboratory into clinical practice, will be expanded.**
- Expanded educational offerings for health professionals interested in public and community health will be provided by both schools.**
- Population and community health research will be augmented to facilitate the identification of health care priorities for the state. Initial emphases will include women's and children's health.**
- More efforts will be made through multiple communication methods to disseminate findings to providers and consumers throughout the state. Telemedicine, teleconferencing, health informatics, and distance education will be developed to better serve Wisconsin's health care and education needs.**

## A. THE MEDICAL COLLEGE OF WISCONSIN

### 1. INTRODUCTION

The Medical College of Wisconsin is a national, private, academic institution dedicated to leadership and excellence in its fourfold mission: Education, Research, Patient Care, and Community Service. Our core competency is medical knowledge, which underpins every aspect of our mission.

The Medical College of Wisconsin offers MD, PhD, MS, MPH and MA degrees. In addition, residency training programs are offered in almost all medical specialties and subspecialties with our affiliated hospital partners. The Medical College of Wisconsin Affiliated Hospitals (MCWAH) Residency Program coordinates 680 residents at training sites within 12 hospitals in southeastern Wisconsin. Graduates from the Medical College of Wisconsin represent more than one third of the physicians currently practicing in the state. MCW also provides continuing medical education to more than 15,000 health professional registrants each year.

The Medical College of Wisconsin is also a major national research center. In FY 1999, College faculty received more than \$67 million in external support for research and training grants. The translation of research from the ~~bench~~-laboratory to the bedside is critical to improving the health of our citizens. The generation of knowledge and its application to human health problems is one of our strengths. Some examples of these applications are noted below:

Researchers in the Medical College Cancer Center are leaders in the development of photodynamic therapy, which is used in conjunction with conventional surgery to kill cancer cells that surgery alone cannot reach. Medical College faculty are also national leaders in the development of a "suicide gene" to counteract complications of bone marrow transplants in cancer patients who develop graft versus host disease. Clinical research faculty at MCW have also discovered the a genetic defect for which causes some forms of joint inflammation, thus advancing our ability to detect and treat arthritis.

Nationally, more than two billion dollars a year are spent combating hospital acquired pneumonia, a condition most often contracted by patients already under intensive care. MCW and University of California-San Francisco researchers have recently developed antibodies as an alternative to antibiotics in the fight against this deadly class of microbes. Their findings could help develop immunization against the bacterium which are-is responsible for most hospital acquired pneumonia deaths.

Medical research discovers the causes of disease, and thus the means to identify, treat and prevent them. Education teaches health professionals, communities and policy makers what has been learned through the medical research and how to implement the knowledge. This advancement of science results in improved public health through changes in the environment, life-style and medical practice. Examples of these changes include less water-borne disease, polio immunizations, early cancer screenings, improved

air quality, and early identification of cardiac risk factors, all of which result in practical help to communities with populations at risk.

These types of advancements enhance the health of the entire population of the state. MCW faculty clinicians also work collaboratively with faculty scientists to develop new ways of preventing and treating diseases, thus providing the citizens of Wisconsin with access to some of the finest, most advanced health care available.

We believe that academic/community partnerships, in both the urban and rural areas of the state, are the most effective means for meeting the health care challenges of the next millennium. The training of health care professionals, the identification of health care concerns, and the translation of medical advances into every day practice will significantly advance the health of all of Wisconsin's citizens.

As a private, independent school, the Medical College of Wisconsin has sought collaborative relationships with urban and rural health care systems, state and local governments, industry, the federal government, and colleagues nationally and internationally.

In every successful partnership we have undertaken, knowledge, based on the methods of science, has been provided by faculty from many disciplines. Sample partnerships are noted below:

- Training programs and provision of physician services at Federally Qualified Community Health Centers such as the Isaac Coggs Clinic, and the Sixteenth Street Clinic, as well as support of clinics in federally designated physician-manpower shortage areas, such as Family House, and the Lisbon Avenue Clinic, all located in Milwaukee.
- Affiliations with 82 health care facilities throughout Wisconsin for ambulatory clerkships, preceptorships, and externships in Southeastern Wisconsin and communities such as Minoqua, Wisconsin Rapids, Elkhorn, Sturgeon Bay, Burlington, Beaver Dam and Lac du Flambeau.
- Research collaborations such as the coordination of the nation's largest clinical genetics study to identify genes associated with obesity in which the Marshfield Clinic is participating with MCW.
- Coordination of the Medical Information Network, providing linkages for health care and educational libraries at 22 sites in Wisconsin communities such as Berlin, Rhinelander, Sparta, Fort Atkinson, Sturgeon Bay and Woodruff.
- Educational program partnerships with Marquette University, Milwaukee School of Engineering, UW-Milwaukee, and UW-La Crosse.

- Coordination of the Midwest Ethics Network at more than 70 health care and educational sites throughout Wisconsin in communities such as Beloit, Eagle River, Wisconsin Rapids, Peshtigo, Appleton, Rice Lake, Amery, and Dodgeville.

The College's ability to build upon these types of collaborative relationships, to meet current and future health care challenges effectively, has been a key to our success. While the Medical College of Wisconsin is not a grant making agency, MCW does, through its strong partnership arrangements, bring resources to help address certain health needs, and we welcome the opportunity to partner with other groups, in both urban and rural communities, to enhance the public's health throughout the state.

## 2. PLAN OVERVIEW

This gift affords the Medical College of Wisconsin a signal opportunity to extend its missions of education, research, patient care and community service to create a healthier Wisconsin. To accomplish this, MCW proposes reserving an amount not to exceed \$12-15 million for initial expenditures, in order to immediately launch new programs and to expand existing programs identified in this plan, while preserving the remainder of the gift as a permanent endowment. A named Blue Cross & Blue Shield "Endowment Fund" will be established to assure accountability for fund expenditures.

This endowment will allow for on-going support of initiatives to enhance the health and wellbeing of the citizens of Wisconsin. It is not our expectation to replace or fund those programs for the public's health that have traditionally been the responsibility of government. Rather, we propose to provide an ongoing medical knowledge and manpower resource to organizations as a part of the solution to improve the health of all citizens of our state.

This document outlines our current vision for the use of this gift to advance the health of the state. However, our approach must be periodically re-examined in relation to changes in the health needs of Wisconsin's populations, technology and research development and other factors. The plan will serve as a guide, a living document, knowing that we must be flexible to achieve our goal of improving the health of the citizens of Wisconsin.

The Blue Cross & Blue Shield Endowment Fund will support activities in three major areas: (1) MCW's new ~~Blue Cross & Blue Shield~~-Institute for Public and Community Health, (2) Research for a Healthier Tomorrow and (3) Education and Leadership for Public Health.

Initiatives supported through the Blue Cross & Blue Shield Endowment Fund will strengthen statewide disease and injury prevention efforts, provide leadership in public health, and improve health status (especially in underserved areas), while helping to find the cure for life shortening and deadly diseases. The strategic areas of emphasis are outlined below:

3. **MCW BLUE CROSS & BLUE SHIELD INSTITUTE FOR PUBLIC AND COMMUNITY HEALTH**

Improvements in health are achieved not only through medical research and the training of health care providers, but also by educating the public on how to improve and maintain health. Many illnesses are a combination of environmental, behavioral, and genetic factors. In some cases, disease prevention will require lifestyle changes which are relatively inexpensive, but difficult for individuals to accomplish. In other cases, research regarding the health of large population groups will provide a framework for public policy changes that could alleviate certain health care conditions, such as lead poisoning.

Through the creation of the new MCW Blue Cross & Blue Shield Institute for Public and Community Health, MCW will provide professional expertise, coordination of community programs and enhanced visibility for issues related to improving the health status of citizens throughout Wisconsin. MCW proposes to provide a core of infrastructure support to address health concerns of various communities, support prevention & wellness programs, and facilitate diverse areas of health services research, while partnering with various health care organizations, especially in underserved urban and rural communities throughout the state.

The Institute will have a statewide focus, and Institute support staff will facilitate and coordinate collaborative program initiatives with communities and organizations throughout Wisconsin. It will be led by a Director, who will report to the College's Dean and Executive Vice President. The Director will oversee the budget and operational activities of the Institute. An Advisory Board of community leaders will be formed. It will consist of 8-12 members, with an interest in public and community health, selected by the MCW Board of Trustees. The Advisory Board, in consultation with Institute staff, will develop and evaluate strategic priorities for the Institute and serve as advocates for, and generally oversee, the Institute's programs which will receive 35-45 percent of the annual endowment income.

Strategic priorities of the Institute will guide the development of new Institute programs and community collaborations. A framework for building effective community partnerships will be a key component of the development of the new Institute. A commitment to an agreed-upon set of principles is a critical first step for long-term success of a partnership. Using these principles as a guide, a partnership agreement which clearly identifies the roles and responsibilities of each partner, along with well-defined outcomes and mutual benefits is developed. Each member of the partnership will provide resources to support health improvement strategies. This can occur through the provision of expertise, manpower, facilities or funding.

This partnership process depends upon the creation of a shared vision and integrated approach to improved community health. This vision relies on shared responsibility across a broad range of community stakeholders, combined with individual accountability

for those responsibilities. The process is both interactive and evolving, and is based on evidence that briefly assembled coalitions and isolated solutions are not adequate to improving the overall health of the citizens of Wisconsin.

*a. Prevention/Wellness.*

There has been a movement in community health, as in health care in general, emphasizing prevention and wellness activities. This provides a pro-active, more cost effective method to address long-term health concerns than current intervention and treatment strategies. National prevention/wellness goals are to increase the span of healthy life, reduce health disparities and achieve access to preventive services for all citizens. To achieve these goals, greater emphasis must be placed on health promotion, health protection, preventive services, and surveillance and data systems.

Academic/community partnerships are indispensable to providing effective prevention and wellness programs. Lifestyle adjustments can have a significant impact on health status. However, lifestyle changes may be difficult for individuals to accomplish, and additional community support mechanisms can be crucial to sustain lifelong modifications.

Prevention and wellness initiatives are a key component in achieving significant improvements in health status. The diseases that represent the leading causes of death in adults (i.e. cardiovascular disease, cancer, stroke) all have modifiable risk factors. It is estimated that 30 percent of cancer deaths are due to tobacco use, while dietary factors account for about another 35 percent of all cancers. Lifestyle modifications alone could provide dramatic health improvements, if successfully maintained.

The ~~MCW Blue Cross & Blue Shield~~ Institute for Public and Community Health will support a broad spectrum of community prevention/wellness initiatives throughout the state, along with behavior modification research to develop effective lifestyle modification programs. Specific emphasis will be given to prevention and wellness programs in *cancer, cardiovascular disease, child & adolescent health, and women's health*. Special consideration will be given to the needs of underserved urban and rural communities. These initiatives will be developed in collaboration with community partners within the framework of the Institute's strategic directions.

A listing of focus areas, with sample risk factors and prevention/wellness strategies are identified below:

<u>Focus Area</u>	<u>Risk Factors</u>	<u>Prevention/Wellness</u>
Cancer	- Smoking	- Smoking cessation
- Smoke-free buildings	- High fat/low fiber diet	- Nutrition programs
	- Lack of exercise	- Fitness programs
	- Obesity	-Weight management

<b>Cardiovascular Disease</b>	<ul style="list-style-type: none"> <li>- Hypertension</li> <li>- Elevated blood lipids</li> <li>- Smoking</li> <li>- Lack of exercise</li> <li>- Diabetes</li> <li>- Obesity</li> <li>- Stress</li> </ul>	<ul style="list-style-type: none"> <li>- Blood pressure management</li> <li>- Cholesterol management</li> <li>- Smoking cessation</li> <li>- Fitness programs</li> <li>- Diabetes management</li> <li>- Weight management</li> <li>- Coping strategies</li> </ul>
<b>Child &amp; Adolescent Health</b>	<ul style="list-style-type: none"> <li>- Infant mortality</li> <li>- Low birth weight</li> <li>- Teen pregnancy</li> <li>- Sexually transmitted diseases</li> <li>- Lack of immunizations</li> <li>- Asthma</li> <li>- Lead exposure</li> <li>- Malnutrition</li> <li>- Smoking</li> <li>- Alcohol &amp; drug use</li> <li>- Suicide ideation</li> </ul>	<ul style="list-style-type: none"> <li>- Prenatal care</li> <li>- Prenatal care</li> <li>- Sex education</li> <li>- Sex education</li> <li>- Immunizations</li> <li>- Asthma management</li> <li>- Lead abatement</li> <li>- Nutrition programs</li> <li>- Alcohol and drug education</li> <li>- Mental health programs</li> </ul>
<b>Women's Health</b>	<ul style="list-style-type: none"> <li>- Osteoporosis</li> <li>- Diabetes</li> <li>- Sexually transmitted diseases</li> <li>- Mental health</li> <li>- Domestic violence</li> <li>- Menopause</li> </ul>	<ul style="list-style-type: none"> <li>- Nutrition programs</li> <li>- Diabetes management</li> <li>- Safe sex education</li> <li>- Mental health programs</li> <li>- Shelters &amp; counseling</li> <li>- Hormonal management</li> </ul>

Prevention and wellness programs will be most effective when they are developed and implemented in a partnership with communities. The community will participate in identifying health issues and developing interventions. Cultural belief systems and literacy levels will be considered when developing interventions. Examples of current MCW prevention/wellness initiatives include:

***Cancer Prevention Initiative:*** This initiative is designed to increase awareness of cancer, and to develop culturally appropriate prevention activities for underserved communities. The program employs a community health advocate model that uses social networks to effect healthy lifestyle changes. This initiative is currently operational at one public housing development in Milwaukee.

***Healthy Aging Initiative:*** This initiative, which is just beginning, advances the health of older adults by working with community organizations to develop programs that increase gerontological health education and services in underserved communities.



*Women's Health Initiative:* This initiative, which began four years ago, evaluates, over time, the health of a cohort of women with particular emphasis on cardiovascular disease, cancer and hypertension. In addition to this program, MCW will review the expansion of women's health activities with UW Medical School's newly established Center for Urban Population Health, to be located in Milwaukee. Areas of collaboration to consider in the Milwaukee metro area may include teen pregnancy, family planning, domestic violence, detection and treatment of sexually transmitted disease, cancer screening and menopause. Cooperative program could range from prevention and wellness programs to prospective research on the interrelationships of female health problems with diet, life style, environmental threats and wellness programs.

*b. Health Issues.*

Health concerns vary among communities throughout the state. Issues differ based upon a variety of factors, including (but not limited to) age, sex, race and ethnicity, and geographic location. In addition, underserved communities often have unique health concerns which need to be specifically addressed.

These concerns cover a broad spectrum of issues, including factors related to access to health care, environmental health problems (such as lead abatement), lack of health care providers and poor patient education. In some instances, communities may have similar health concerns, such as diabetes, but require very different strategies to address the concerns due to the unique demographic characteristics of the community.

Below is a list of some of the environmental, physical, and mental health concerns and health access issues facing rural and urban communities in Wisconsin.

<u>Health Concerns</u>	<u>Rural Communities</u>	<u>Urban Communities</u>
Physical Health	<ul style="list-style-type: none"> <li>- Increased levels of diabetes &amp; hypertension in Native American communities</li> <li>- Elevated levels of insecticide poisoning &amp; back injuries in migrant workers</li> </ul>	<ul style="list-style-type: none"> <li>- Increased levels of diabetes, hypertension &amp; cancer in African American communities</li> <li>- Poor nutrition for Hmong communities</li> <li>- Asthma</li> <li>- Gang violence</li> </ul>
Environmental Health	<ul style="list-style-type: none"> <li>- Clean water</li> </ul>	<ul style="list-style-type: none"> <li>- Clean water</li> <li>- Clean air</li> <li>- Lead abatement</li> </ul>

**Access to Health Care**

- Purchasing affordable health insurance for agricultural families
- Lack of primary care providers in some rural areas
- Continuity of care for migrant workers
- Access to dental care for underserved population
- Access to culturally competent & appropriate health care
- Lack of primary care providers in central city
- Access to dental care for underserved population

The ~~MCW Blue Cross/Blue Shield~~ Institute for Public and Community Health will strengthen existing community partnerships and forge new community collaborations to help address these and other emerging health care concerns. Community/academic partnerships can effectively address these health concerns by bringing to bear the skills and knowledge of both partners. While academic institutions have expertise in health prevention and maintenance, community-based organizations are familiar with the strengths, needs, and culture of their communities. Working together, partners can successfully assess community concerns, and develop and implement appropriate intervention strategies.

Examples of Existing MCW community health initiatives, such as include the Center for Healthy Communities, and the Center for the Advancement of Urban Children~~Children and the Wisconsin Injury Research Center would be supported by The Institute~~would institute, potentially support expansion of these initiatives along with new programs developed in cooperation with community organizations throughout Wisconsin. MCW looks forward to working with new and existing partners throughout the state to improve the health of our citizens.

*c. Health Services Research.*

Health services research is a field of inquiry dealing with access, cost, quality, and outcome of health care services. To plan effectively for the health priorities of Wisconsin residents, additional research, access to scientific expertise and data systems are needed. Research relating to the identification of health risks, medical effectiveness and patient care outcomes will be conducted in the Institute. Public health agencies, voluntary health organizations, community agencies and health care providers will be asked to participate and collaborate on these research endeavors to better identify and meet the needs of our state.

Health services research requires the collaborative interaction of multiple disciplines. We will expand our capacity in the areas of biostatistics, epidemiology and economics, as well as utilizing our existing strengths in those disciplines and in the Departments of Medicine, Family Medicine, Pediatrics and the Health Policy Institute to support expanded health services research initiatives.

An example of a health services research initiative is MCW's Wisconsin Injury Research Center, organized by the Department of Emergency Medicine. Injuries are increasingly being recognized as one of the most important public health problems facing society. The College's Wisconsin Injury Research Center is an interdisciplinary center which serves community organizations, governmental and health agencies, public policy decision makers, health care systems and others interested in reducing injury deaths and disabilities.

The Center conducts state of the art injury control research, assists community organizations in injury control program development and evaluation, and provides accurate and comprehensive information on the occurrence, nature and outcomes of injuries. An example of research that may impact public policy decision making is the recent publication of the Center's analysis on gun buybacks in Milwaukee County. The researchers found that the buyback program did not remove the guns most responsible for fatalities. This finding will help policy makers maximize resources to enhance the welfare of the public.

The ~~MCW Blue Cross/Blue Shield~~ Institute for Public and Community Health will work with organizations and agencies throughout Wisconsin to identify areas of health services research which are needed to effectively plan for the state's future health needs. These academic/community partnerships are essential to the successful identification of community needs and the support, development and implementation of joint programs to address these concerns.

We believe that focused investment by ~~MCW the College~~ in the ~~MCW Blue Cross & Blue Shield~~ Institute of Public and Community Health will help to leverage additional funding opportunities and successes for diverse groups and programs to improve the health status of the citizens of our state. The Advisory Board of the ~~MCW Blue Cross & Blue Shield~~ Institute of Public and Community Health will share responsibility with ~~MCW College~~ leadership to evaluate and shape programs of the Institute.

Those programs of the ~~MCW Blue Cross & Blue Shield~~ Institute for Public and Community Health which have a local, Milwaukee area focus, will be coordinated with the UW Medical School's newly established Center for Urban Population Health, to be located in Milwaukee. Initial areas of collaboration include prevention and wellness programs to address concerns related to women's health (e.g. osteoporosis, cancer screening, domestic violence, etc.) and improvement in child and adolescent health (e.g. prenatal care, immunizations, lead, etc.).

#### 4. RESEARCH FOR A HEALTHIER TOMORROW

The 21st century will be a time of change and enlightenment. New research discoveries will make some illness preventable. In some cases, prevention will require lifestyle changes, in other cases, novel medical therapies may be required. While people may be able to stay healthier longer, they will eventually succumb to a variety of illness and

disabilities. Medical research must focus on the main causes of death and methods to prevent and treat these illnesses. In addition, the translation of research from the laboratory, into clinical practice, must be hastened.

The Medical College of Wisconsin will utilize 35-45 percent of the Blue Cross & Blue Shield annual endowment fund income to support research into the prevention and possible cures of the major causes of death and disability among Wisconsin citizens. Funding to expand access to clinical research trials for a broader segment of the state's population will also be provided. By expanding this clinical research access, MCW will be able to speed the translation of research findings into community practice norms.

Cardiovascular diseases and cancer are the leading causes of death for the citizens of Wisconsin. Approximately two thirds of all deaths in the state are attributable to these two diseases.<sup>9</sup> Stroke, a neurodegenerative disorder, is the third leading cause of death in the state, with frequent debilitating consequences for its survivors. During the past twenty years, considerable progress has been made in the treatment and prevention of these diseases. However, grim statistics indicate that much remains to be done to reduce the devastating impact these diseases have on the lives of our citizens.

MCW and the UW Medical School will continue to pursue a complementary approach to biomedical research into the leading causes of death in Wisconsin, emphasizing the strengths of both organizations. For example, MCW's approach to cardiovascular disease, cancer and neurodegenerative diseases, such as stroke and Alzheimer's disease, will include an emphasis on the genetic understanding of these afflictions. The College's strengths lie in the assessment of complex genetic disorders and gene function. UW Medical School's strengths in this area of emphasis are in statistical genetics and genetic models. Both schools also have active collaborations regarding the genetics of various diseases with the Marshfield Clinic, whose strength lie in the detailed analysis of gene sequences. This pluralistic approach towards research into the major causes of death and disability in the state utilizes the strengths and capabilities of a variety of institutions to further our joint goal of improving the health of the public.

*a. Cardiovascular Diseases*

There are approximately 191,000 individuals currently residing in Wisconsin who have cardiovascular disease. It is the number one cause of death in the state with more than 19,000 people dying every year. Cardiovascular disease and heart attacks occur more in men than women, though heart attacks are more likely to be fatal for women. There is also a greater prevalence of high blood pressure and heart attacks among African Americans.<sup>5</sup> Despite advances in the detection and treatment of cardiovascular disease, it remains the leading cause of death nationwide.

Researchers at the Medical College of Wisconsin and the UW Medical School have made important contributions to recent advances in understanding the pathophysiology of diseases of the heart and vasculature. While each group has achieved excellence in its own right, together they are among the foremost groups of cardiovascular investigators in

the nation. This leadership in cardiovascular research is evident at the national level and has had some statewide impact, where despite being the leading cause of death, Wisconsin's cardiovascular death rate is lower than the national average.

The focus of the research varies between the two organizations. For example, MCW faculty are nationally recognized leaders in hypertension research, while UW Medical School scientists have concentrated on heart failure mechanisms and blood vessel disorders. Funding for cardiovascular research will support a variety of initiatives, including expanded research collaborations between MCW and the UW Medical School.

Research funding support will be coordinated between the two institutions to avoid any potential duplication of focus. MCW's research efforts will include hypertension and coronary artery disease, as well as a specific emphasis on the genetic basis for cardiovascular disease, especially hypertension. Hypertension within the African American population as well as the increasing incidence of heart disease among women will also be studied.

*b. Cancer*

Cancer is most prevalent in the southeastern section of the state. In the most recent data available, (1999), southeastern Wisconsin has a cancer mortality rate of 173/100,000 population, compared to a state average of 159/100,000. Milwaukee County has the highest cancer death rate/population of any county in Wisconsin.<sup>8</sup>

From 1973-1990 national cancer incidence rates increased for almost all cancers. However, by 1995 research advances provided for the introduction of better therapies, enhanced cancer detection, and broader prevention programs, resulting in a simultaneous decrease in both incidence and mortality for almost all cancers.<sup>4</sup>

Today, more people are surviving cancer than ever before. However, there are still problems and concerns amidst this good news. As the population increases and ages, the absolute number of cancer cases expands. Continued growth in the number of cancer survivors, and their longer survival times, will result in an increase of cancer morbidity as a major public health problem.

Unfortunately, breast cancer mortality for African Americans is not decreasing. Incidence and mortality rates for lung cancer among women is still increasing and incidence rates of melanoma and lymphoma among all populations is still rising.<sup>4</sup>

In 1999, the American Cancer Society (ACS) estimates that approximately 23,700 new cancer cases will be diagnosed in Wisconsin. In 1999, the ACS estimates that 3,400 new cases of breast cancer will be diagnosed among women in the state, and 800 women will die of breast cancer. 4,100 new cases of prostate cancer will be diagnosed among men in Wisconsin, and 800 men will die of prostate cancer this year.<sup>7</sup>

MCW's research efforts will focus not only on detection, treatment, and cures, but will also include a specific emphasis on the genetic basis for cancer. Many areas of cancer

will be investigated including breast, prostate, colon, lung, gynecologic, and leukemia/lymphoma. Cancer prevalence in Wisconsin will be studied as well as higher incidence rates for women, and African American populations.

*c. Neuroscience.*

Neuroscience research investigates diseases of the brain through diverse techniques including genetic models of degenerative disease, brain mapping and the biology of brain cells. Neuroscience research progress will help to alleviate the long-term cost and reduced quality of life from Alzheimer's, Parkinson's, epilepsy and stroke. Wisconsin continues to exceed the national death rates for Alzheimer's disease, while stroke is the third leading cause of death in the state, after cardiovascular diseases and cancer.<sup>3,9</sup>

Strokes occur when the flow of blood to the brain is blocked in an artery by a blood clot or other substance, or when an artery ruptures. After age 55, an individual's chance of having a stroke more than doubles each decade. The number of people in Wisconsin, alive today, who have had a stroke is estimated at over 61,000.<sup>5</sup>

In Wisconsin, over 3,500 people die every year from stroke. Overall, men have about a 19 percent greater chance of stroke than women. However, women who have had a stroke are almost twice as likely to die. For reasons not completely understood, African Americans have one of the highest stroke rates in the world.<sup>5</sup>

Currently, more than 40,000 people in southeastern Wisconsin have Alzheimer's disease, with an additional 100,000 throughout the state.<sup>1,6</sup> After cancer, Alzheimer's disease is the most expensive disease in the country, with an estimated expenditure of \$100 billion spent on health care or lost wages for the person with the disease or the caregiver. Annual long-term care costs alone are estimated at well over \$500 million for Wisconsin Alzheimer's patients.<sup>2</sup>

Research related to these various neurodegenerative disorders will be coordinated with the UW Medical School. For example, in 1985, MCW formed a comprehensive Dementia Research Center. In 1998 the UW Medical School established the Wisconsin Alzheimer's Institute. The Dementia Research Center and the Wisconsin Alzheimer's Institute, with the Helen Bader Foundation, are already collaborating on dementia research, and the establishment of statewide programs including the development of diagnostic centers, mechanisms of family support, and educational materials. The programs of both organizations have differing areas of emphasis. Whereas the Wisconsin Alzheimer's Institute is focused on rural and statewide concerns, the Dementia Research Center is targeted on urban and minority needs.

In addition to providing progress in the detection and treatment of diseases such as Alzheimer's, Parkinson's, epilepsy and stroke, neuroscience research may also provide insight into a variety of mental health disorders such as schizophrenia and manic-depressive disease. Research will also provide keys to the brain's response to various substances, thus facilitating advancements in treatment programs for addiction.

*d. Clinical Research Collaborations.*

Research funding will also be used to support expanded geographic access to clinical research trials around the state and to promote research collaborations with other health care providers, voluntary health care organizations and research institutions. By broadening clinical research partnerships and expanding patient access to new treatment protocols, we will enhance opportunities to find cures for life shortening diseases.

The translation of research findings from the bench to the bedside is critical to improving the health of the citizens of the state. As an example of this impact, in the mid-70s, as the National Cancer Institute (NCI) searched for a cancer cure, gallium and other metals were tested for anti-cancer activity. The NCI found that gallium killed cancer cells, but scientists did not know how or why.

In 1988, faculty at MCW published a paper on the synergistic effect of gallium nitrate and hydroxyurea (another anti-cancer drug) in killing cancer cells. In 1989, gallium nitrate was approved for use by the FDA and became readily available. In 1990 MCW faculty wrote the first clinical trial protocol combining gallium and hydroxyurea. MCW researchers subsequently found a third and fourth drug that, in combination with gallium nitrate and hydroxyurea, achieved a higher tumor cell kill in treating lymphoma.

The two-drug and four-drug clinical trials were done with non-Hodgkin's lymphoma patients. There will be 53,600 new cases of non-Hodgkin's lymphoma in the U.S. this year. Incidence has gone up 80 percent since 1970, for unknown reasons. Wisconsin will have 1,200 new cases this year with 540 deaths.

Before 1970, virtually all these lymphoma cases were fatal. Survival now is 1 year - 71%; 5 years - 51%; 15 years - 34%. Advances have been made through the incremental development of multi-agent chemotherapy, and now the increasing success of bone marrow transplantation as a treatment. This basic research, transferred ultimately to the direct care of the patient is an example of the overall positive impact of translating research from the bench to the bedside to improve the overall health status of the public.

## **5. EDUCATION AND LEADERSHIP FOR PUBLIC HEALTH**

The education of health professionals, like the practice of medicine, is a constantly changing, dynamic process. New programs are offered, while others are revised to respond to the ever-changing challenges in health care. The health status of the population directly relates to the education of our health professional workforce and the knowledge level of the general public regarding healthy lifestyles.

MCW is first and foremost an educational institution. We not only train health professionals and scientists, both also provide continuing education programs and educational opportunities for patients and the public.

The public is hungry for health information. Providing accessible health and wellness information to the public will enhance their understanding and hopefully encourage their active participation in advancing their health and that of their families.

The Medical College of Wisconsin conducts a "Mini Medical School" program for the public. The fifth season of the Mini Medical School begins this October. Entitled, *Healthy Lives for Women and Men: A Look At Healthy Living and Disease Prevention As We Enter The New Millennium* the lecture series includes something for everyone. Offered over nine weeks, the school brings together the major health issues that concern us all, some of which are specific to gender. Three sessions target women's issues, three target men's health, and three programs address health topics of interest to everyone.

MCW also provides patient education and community health education seminars. A variety of approaches are utilized to extend health information to the public. As an example, interactive health kiosks have been placed at some Medical College of Wisconsin clinics and a local library. In one year, more than 40,000 people have accessed the health information available - ranging from pharmaceutical to disease specific information.

We have also established a Medical College of Wisconsin web site entitled "HealthLink" which provides access to expert information from Medical College of Wisconsin physicians on a wide variety of topics and diseases. HealthLink has been immensely popular in its first year and receives more than 200,000 inquiries each month. In addition, Medical College of Wisconsin physicians feature biweekly "columns" in the Milwaukee Journal-Sentinel and CNI Community Newspapers throughout the metropolitan Milwaukee area. These columns are expanded regularly by MCW faculty who appear regularly on television or in the press.

While patients must learn better methods to improving their health, medical professionals must also be educated regarding the latest medical research, treatment information and changes within the profession. To assure the transfer of new knowledge to the care of our citizens, health care professionals must have easy access to educational and training programs. Recent advances in information technology have provided expanded opportunities for distance education and teleconferencing to provide this educational access. The Medical College of Wisconsin will devote 10-20% of the annual earnings of the Blue Cross & Blue Shield endowment fund for the following educational programs:

*a. Educational Outreach.*

MCW currently offers computerized access to medical library holdings, medical literature searches, health resources (HealthLink), distance learning opportunities for physicians and continuing medical education programs for health professionals throughout the state. These offerings will be expanded, new distance learning initiatives for health care professionals implemented and teleconferencing program opportunities will be provided. ~~Where appropriate, joint educational outreach offerings will be provided by MCW and the UW Medical School.~~



MCW will work with the UW Medical School to establish a collaborative, statewide health information network that will encompass both personal and public health issues. Network development may include both electronic information through means such as websites, and video/satellite technology to provide conferences and discussions of both personal and public health issues. These jointly offered conferences and health information repositories will allow for contributions from the faculty of both schools and will increase the number of offerings available to the public. In addition, MCW will, in the year 2000, join UW-Madison, UW-Milwaukee and WiscNet in a coalition interfacing with an upgraded electronic information highway, known as "Internet2".

Additional health care training programs in rural and medically underserved areas would also be supported by MCW through this educational outreach initiative in collaboration with community providers and health care organizations. This would include expanding medical student externships and rotations in rural and medically underserved areas of Wisconsin, as well as expanding residency rotations at these sites. MCW will also investigate the potential of expanding or establishing new residency training sites in collaboration with community health care partners to meet the needs of the underserved areas of the state.

*b. Masters of Public Health.*

The citizens of Wisconsin expressed a desire for expanded educational opportunities for individuals involved in public and community health. The Medical College of Wisconsin's existing Master of Public Health program offers degrees in Health Services Administration, Occupational Medicine and Preventive Medicine to individuals with a medical degree. The College is currently in the process of expanding the Master of Public Health curriculum for non-physicians, to reach a broader student population, eager to obtain MPH certification.

The curriculum development and accreditation process for the program expansion will take approximately two years to complete. Following all required approvals, MCW anticipates entering its first non-MD MPH students in the fall of 2001.

*c. Student Scholarships.*

To support students with an interest in health sciences professions, ten full medical scholarships will be made available to qualified medical students. These student scholarships will have a special emphasis on minority and rural students. The scholarships will include a requirement to practice for a minimum of three years in a medically underserved urban or rural location of the state upon completion of residency training and medical licensure. Placements for these students to fulfill their scholarship obligation would be sought in collaboration with community organizations in underserved locations of Wisconsin.

**6. FUND MANAGEMENT**

This gift provides the Medical College of Wisconsin with an opportunity to impact positively the health of our citizens. This document outlines our strategic initiatives to

achieve this goal. To carry out this plan, MCW proposes reserving an amount not to exceed \$12-15 million for initial expenditures, to implement the plan as rapidly as possible, while preserving the remainder of the gift as a permanent endowment. This endowment will allow for on-going support of the programs mentioned above to enhance the health and well being of the citizens of Wisconsin.

The initial \$12-15 million of expenditures will launch new programs and expand existing centers. The momentum of these programs will be maintained with the annual income stream from the endowment. Thirty-five to 45 percent of the initial \$12-15 million would be used within the MCW Blue Cross & Blue Shield Institute for Public and Community Health. This will be used to support the development of the Institute, including the recruitment of a Director, additional faculty and support staff, ~~and infrastructure to maintain community liaisons in support of Institute goals.~~ creation of strategic priorities, and mechanisms to facilitate community collaborations and dissemination of information.

An additional 35-45 percent of these initial expenditures would support a rapid expansion of our research capacity to find cures for disease and prevent diseases from occurring. This would include recruitment of faculty focused in the research priority areas identified in this plan, purchase of scientific equipment to support these programs, and expansion of our clinical research efforts through a new office overseeing clinical research and clinical trials.

Finally, 10-20 percent of the initial \$12-15 million would be devoted to improving and increasing health professional educational efforts at MCW and statewide. This will support the process to expand the MPH curriculum, develop mechanisms to award and fund the 10 medical student scholarships, and augment the Medical College of Wisconsin's infrastructure to expand tele-education and teleconferencing capabilities to provide enhanced educational outreach programs around the state.

A named Blue Cross & Blue Shield Endowment Fund will be established. Approximately 35-45 percent of the annual endowment fund earnings would be used to support programs within the MCW Blue Cross & Blue Shield Institute for Public and Community Health. The distribution of these funds will follow the strategic priorities established by the Institute in consultation with the Institute Advisory Board.

An additional 35-45 percent of the annual earnings from the endowment would be allocated to support critical research efforts. Cardiovascular, Cancer and Neuroscience research would each receive approximately 25-30 percent of the research funding, while clinical research collaborations would be allocated 10 - 20 percent of the annual research support. These figures could vary somewhat, based upon the quality of research proposals submitted for funding. The remaining 10-20 percent of annual endowment proceeds would be used to support the various educational initiatives.

In accordance with our Board of Trustees' policy for all endowed funds, five percent of the fund's ~~income~~ market value is available for annual expenditure. ~~Any remaining~~ Investment income in excess of 5% is returned to the principal to offset inflation and

maintain purchasing power over time. Based upon this distribution policy, we estimate that an appropriation of between \$4 million - \$7 million would be available each year to support programs to create a healthier Wisconsin when the endowment account is fully funded.

MCW plans to recommend an endowment policy modification for consideration by the Board of Trustees. The College will request that the Blue Cross & Blue Shield Endowment Fund be allowed to distribute all endowment earnings in the immediate start-up years (one through five) to support beginning programs expenditures and initial costs. Thereafter, disbursement of endowment income will follow institutional endowment policies. These policies require that a portion of the investment earnings be reinvested each year, with the endowment principal, to maintain endowment value and taking into account anticipated inflation.

Annual allocations from the endowment fund will be made by the MCW Budget Committee in accordance with the mission of improving the health of the public adopted by the Blue Cross & Blue Shield United of Wisconsin Foundation's General Purpose Statement and the Principles of Stewardship outlined in this report.

The MCW Budget Committee will make a separate annual allocation to the program areas identified in this plan. The allocation made to the MCW Blue Cross & Blue Shield Institute for Public and Community Health. ~~These funds will be expended by the Institute according to the strategic directions established by of the Institute, and its Advisory Board.~~

## 7. STEWARDSHIP

The Medical College of Wisconsin is overseen by a governing Board of Trustees. The Board consists of 34 members. One-third of the Board is appointed by the Governor of the State of Wisconsin, with the advice and consent of the Senate, for staggered terms of six years. Two trustees are appointed to staggered six year terms by the County Executive for Milwaukee County, with the advice and consent of the Milwaukee County Board of Supervisors.

Proper management of the College and effective use of our resources is of vital significance to the Board of Trustees and part of their fiduciary duty. The Board of Trustees meets periodically throughout the year and manages the affairs of the College through its adoption of institutional policies and actions. In addition, committees of the Board meet periodically throughout the year to conduct business. Stewardship of and accountability for the endowment fund will be overseen by the Investment Committee of the Board of Trustees and MCW staff working with consultants and investment managers.

Initiatives supported by the endowment fund must provide annual reports regarding budgets, expenditures and progress in meeting project goals. These reports will be reviewed annually. Funding decisions will be reviewed, revised or terminated on a two-year cycle, as a part of the College's annual budget process.

Annual stewardship reports will be sent to the Blue Cross/Blue Shield Foundation and to the BCBSUW Board of Directors. Annual stewardship reports will outline endowment income received and project expenditures, as well as progress and challenges in meeting program objectives. Every fifth year, the stewardship report will be expanded to provide a detailed assessment of program initiatives funded from the endowment.

The fifth year stewardship report will not only include endowment and expenditure information, and progress in meeting annual goals, but also provide expanded data on communities impacted, collaborations developed, multi-year accomplishments, and additional program funding received by "leveraging" the endowment fund support.

To promote the dissemination of this information, the stewardship reports will be electronically available to the public through the College's internet address. A specific "page" will be established, devoted to highlighting initiatives funded by the Blue Cross & Blue Shield Endowment Fund, as well as providing contact information to facilitate the development of community collaborations, while providing information on program progress.

In addition to the Advisory Board of the ~~MCW Blue Cross & Blue Shield~~ Institute for Public and Community Health, the MCW Board of Trustees will create and appoint a Blue Cross & Blue Shield Endowment Fund Commission. This Commission will have seven members. Commission members will represent a broad cross section of individuals who have an interest in the health of the citizens of the state. This Commission shall have the duty to review and report to the Board of Trustees annually whether the projects funded by this Endowment Fund are in substantial accord with the BCBSUW Foundation's General Purpose Statement and this plan's Principles of Stewardship.

## **8. PERIODIC REASSESSMENT OF STATEWIDE PRIORITIES**

The 21<sup>st</sup> century will provide both challenges and opportunities to improving health. Medical research will continue to progress, and cures will be found for some diseases. At the same time, new health concerns will arise, which cannot yet be anticipated. Our plan to improve the health of Wisconsin must be periodically re-examined in relation to changes in the health needs of Wisconsin's population.

At least every five years, the two medical schools will collaborate on an assessment of the state's health status. This information will be synthesized, and used to evaluate each school's plan to improve the health of the public. Adjustments to each school's strategic priorities may be made therefore, to adapt to the changing health care needs of the state.

This plan provides a blueprint for the future, but is not static. This document serves as a guide to the institution, recognizing that we work in a dynamic environment and must be flexible to achieve our goal of improving the health of the citizens of Wisconsin. Our ability to accomplish this goal successfully will depend upon our ability to integrate future opportunities and challenges into the plan effectively.

(See footnote references in Appendix C.)

## **B. THE UNIVERSITY OF WISCONSIN MEDICAL SCHOOL**

### **1. INTRODUCTION**

It is indeed an opportune time for the UW Medical School, Wisconsin's public medical school with its statewide orientation, to capitalize on the opportunity afforded by this gift to advance a healthier Wisconsin in the 21<sup>st</sup> century.

The UW Medical School offers the following educational programs: Doctor of Medicine degree; graduate education in clinical and basic sciences; professional degrees for physician assistants, medical technologists, and physical therapists; and continuing medical education. In addition, residency programs are offered in most medical specialties and subspecialties, primarily in association with UW Hospital and Clinics but also with other affiliated hospitals in Madison, Milwaukee, Appleton, Eau Claire and Wausau.

The quality of medical education at the UW Medical School has been nationally recognized including a recent award from the federal Department of Health and Human Services for "Curricular Innovation and Interdisciplinary Collaboration." In addition, *US News and World Report* ranked our Family Medicine department among the top 10 programs nationwide. The School has ranked among the top 15 for its success in training primary care physicians.

Most importantly, the UW Medical School is a world renown research and research training institution, generating scientific knowledge that has been instrumental in the prevention and treatment of a wide variety of diseases and disabling conditions. Some examples of major discoveries emerging from UW Medical School laboratories include:

- Role of the anti-estrogen drug tamoxifen in preventing breast cancer and heart disease in women.
- Determination of the means by which retroviruses, such as the AIDS virus, reproduce.
- Means to rapidly and reliably detect mutations in cancer cells and antibiotic-resistant bacteria and viruses.
- Bone mineral density measurement, fundamental to the early detection and prevention of osteoporosis.
- The Belzer solution, prolonging the viability of organs for transplantation and thereby making organs available for people who need them.
- "An Aspirin-a day" to preserve blood flow through the arteries, standard therapy today for the prevention of heart disease.

- Invention and development of digital subtraction angiography, the most common procedure for diagnosing coronary artery disease

In FY 1999, total extramural research support to the School amounted to \$162 million, of which \$89 million was from the federal government. The Medical School is the largest single recipient of federal funding at UW-Madison, accounting for approximately 30 percent of the campus total. The School's faculty includes many of the nation's leading researchers and clinicians, including National Medal of Science recipients, National Academy of Science members, and, historically, Nobel Prize winners.

The School's ability to utilize this gift wisely and effectively, to the benefit of many of the state's citizens, derives from several factors including:

*Strategic Priorities.* The School has organized its programs during this decade according to strategic priorities developed by faculty consensus under the leadership of Dean Farrell. The mission of the UW Medical School is "Meeting the health needs of Wisconsin and beyond through excellence in education, research, patient care and service." The School's Strategic Plan for the 21<sup>st</sup> Century features a bold, ambitious vision, namely: "The UW Medical School will be one of the nation's preeminent medical schools by excelling in the creation, integration, and transfer of knowledge through a combination of basic, translational and clinical research; a greater emphasis on active learning; and consistently outstanding patient care."

This strategic plan embodies the direction the School will take during the next 10-20 years and articulates the areas of excellence in research, education, and health care the School will pursue. The six strategic program priorities identified in the plan are cancer, cardiovascular and respiratory sciences, neuroscience, women's health, aging, and population and community sciences.

We were gratified to find that these strategic priorities are in general concurrence with the state's health needs and priorities as identified during our recent assessment process. Unquestionably, this gift will serve as a catalyst to implement our strategic mission and to address many of the health concerns of importance to the public. The UW-Madison and its Medical School will oversee the use of the Blue Cross & Blue Shield gift. As one of the top five leading research institutions nationally, UW-Madison is uniquely equipped to make optimal use of those funds. The UW Medical School is the largest component of this research enterprise and strategically positioned to make this endowment the cornerstone of a strategic plan deeply linked to advancing the health of the citizens of the state. Moreover, we anticipate that these funds can be heavily leveraged to further expand their impact.

*Interdisciplinary Opportunities.* As part of the University of Wisconsin-Madison, Medical School faculty and staff have immediate access to colleagues in a variety of other campus units also serving the public's health needs, especially the Schools of Nursing and Pharmacy, the State Laboratory of Hygiene (founded and managed by our faculty), the Institute of Environmental Studies, the Environmental Toxicology Center and others. This geographic proximity encourages collaborative, interdisciplinary approaches to addressing complex and multifaceted

health issues and concerns. In addition, the UW Medical School has strong partnerships with other UW campuses offering health professions programs.

***Statewide Affiliations.*** The UW Medical School has a variety of productive affiliations with other Wisconsin health care organizations that enhance statewide activities related to our fourfold mission. These widely distributed programs and affiliations are based on "The Wisconsin Idea," that the boundaries of the campus are the boundaries of the state. They include:

- A statewide education program in partnership more than 200 community physicians to train first and second year medical students and 24 preceptor sites around the state (stretching as far north as Ashland) for fourth year students. More than 1,400 volunteer clinical faculty in communities across the state participate in medical student education.
- A statewide, nationally recognized family medicine residency program with training sites in Madison, Milwaukee, Appleton, Wausau and Eau Claire.
- A Milwaukee Clinical Campus with 50 full-time faculty operated in partnership with Aurora HealthCare and associated with UW-Milwaukee. Twelve clinical sites within the city of Milwaukee serve the community's ethnically diverse population and provide excellent training opportunities for medical and other health professions students.
- A Western Clinical Campus associated with the Gundersen/Lutheran organization and UW-La Crosse and linked to 22 counties of western and northwestern Wisconsin.
- An affiliation with the Marshfield Clinic that enjoys a 50-year history of collaborative educational programs linking 18 counties in central and northern Wisconsin.
- A variety of other affiliations, such as with Wausau Community Health Care, Inc. and the Howard Young Medical Center in Woodruff.
- Our leadership role with Wisconsin's Area Health Education Center System. This System is organized around four regional centers (Northern, Eastern, Southwest, and Milwaukee), each a nonprofit corporation with a Board of Directors drawn from the region. This Area Health Education Center System brings health-related resources to rural and urban underserved communities. It creates and promotes partnerships among health organizations to facilitate solutions to community-identified needs. This combination of education and community services has been highly beneficial and is now serving almost all Wisconsin counties with a total of well over 150 participating health care and educational organizations.
- Positive working relationships with other statewide organizations addressing the needs of significant population groups including the Great Lakes Inter-Tribal Council representing Wisconsin's 11 Indian tribes, the Women's Health Foundation, the Wisconsin Alzheimer's Association, the Rural Health Development Council, the Rural Wisconsin Health Cooperative, the American Health Association, the Wisconsin Cancer Council and others.

## 2. PLAN OVERVIEW

Through the "Advancing a Healthier Wisconsin Initiative," the UW Medical School will strive to achieve improved population health with an array of programs and initiatives that address the priority public health needs of the state. In "doing what we do best," we will emphasize education and research linked to community service that is responsive and effective for people throughout Wisconsin. This initiative will have a catalytic effect internally on our academic programs, and its external impact will be transforming for the state's citizens.

Our strategic plan, when coupled with the powerful resources of the endowment, provides a unique and in fact revolutionary opportunity to rapidly advance strategic objectives and thereby greatly impact on the health status. When the Clinical Science Center was built twenty years ago, bringing UW Hospital, and the UW-Madison Schools of Medicine and Nursing into close proximity, no one could have predicted the enormous impact of this singular event on the public's health. For the first time physicians, scientists, and other health care professionals were surrounded by a modern, adaptive and synergistic environment that served to rapidly promote the translation of medical discoveries to clinical care, prevention, and public health. The citizens of Wisconsin are still benefiting from the subsequent discoveries in basic and translational research and advances in clinical care. For example, our nationally and internationally recognized organ transplant program has benefited greatly from extensive collaboration between researchers and clinicians. We fully anticipate that the Blue Cross & Blue Shield endowment, used in the manner described in this proposal, will have an even greater impact upon the health of the populace. Moreover, we anticipate that the impact of these funds will multiply through partnering with other resources.

Our initial emphasis will include a balanced mixture of new and enhanced research, education and community service initiatives building on our strategic vision. In addition, the UW Medical School will also increase its efforts to more broadly disseminate research findings that will aid individuals in achieving and maintaining health. At the recent public hearings, consumers expressed considerable interest ~~was expressed in making~~ having greater access to health information ~~more accessible to consumers~~ through electronic means such as websites. This is not been a major activity of our Medical School. However, in response to the great public interest in information on illness prevention and to address a ~~signfieant~~ significant deficiency in School programming, we plan a substantial expansion of our efforts in this area. This will be accomplished through the ~~We plan to expand the use of~~ health informatics and distance education, along with telemedicine capabilities, ~~by providing~~ facilitated by the necessary infrastructure in our new Health Sciences Learning Center. It is our conviction that the 21<sup>st</sup> Century will feature an electronic version of *The Wisconsin Idea* with citizens from around the state accessing the latest health information from UW medical experts by computer from their home, at public libraries, or at other convenient community locations. We believe these information services will also be heavily used by Wisconsin health care providers. Thus, consumers and providers will be able to rely on our Health Sciences Learning Center to provide accurate regularly updated health care information available around the clock.

The UW Medical School proposes to use up to \$20 million for initial expenditures needed to catalyze the development of prevention-oriented programs and infrastructure responsive to the



public's health needs identified during the recent comprehensive assessment. These funds will address critical needs in priority areas of education, research, leadership and information technology. The remainder of the gift will be used as a permanent endowment to be established at the University of Wisconsin Foundation. The residual will also support a combination of education, research and infrastructure programs and initiatives serving the entire state of Wisconsin. In addition, an "Enhancing Community and Rural Health Fund" will be established to support collaborative initiatives with statewide and local organizations. A summary of the proposed use of these funds appears in Section 7.

We intend to regularly monitor state health needs and strategic priorities. If there is a significant delay in the realization of these funds, then this initial plan may need to be revised to reflect changing health needs and/or School priorities.

### **3. ENHANCING COMMUNITY AND RURAL HEALTH FUND** (Five to ten percent of endowment income)

During the assessment process, there was considerable support for collaboration between the medical schools and local and statewide organizations to address health needs. Representatives of many health-related groups described their organization's innovative and effective strategies for dealing with major health concerns including those affecting specific subsets of the population such as women and the elderly or specific diseases such as cancer. In addition, they commented on how much more remains to be done and could be accomplished with additional funding and the help of the state's medical schools.

To facilitate more collaborative initiatives, the UW Medical School proposes to segregate a portion of the initial funding and the endowment (five to ten percent of initial funding and endowment income) as an "Enhancing Community and Rural Health Fund." This component will be available to support innovative projects conducted in partnership with UW-Madison faculty and staff that address targeted health needs in rural and urban communities. Successful projects will focus on generating new knowledge about better approaches to meeting community needs rather than simply expansions of existing services.

Support will be distributed through an annual competitive process based on predetermined criteria and with a matching dollar requirement. Our goal is to make awards that are relatively large (e.g., \$50,000 minimum with \$50,000 increments) so that a significant impact on health status can be achieved. While the award criteria remain to be determined, they would most likely include long term impact, potential to affect the entire state or multiple communities, upstream strategies that prevent disease and disability, likelihood of program continuation at the conclusion of the grant period, organizational experience with the health problem, and ability to foster coalitions. In addition, an evaluation component will be required for each funded project to assure valid assessment of outcomes. ~~Proposals would be reviewed by a~~ A committee chaired by the UW Medical School Dean and including Additional members of this committee could include representatives from governmental health units agencies and voluntary health organizations, UW-Madison faculty and community leaders will oversee the annual competitive process including finalization of review criteria, the review of applications and determination of projects to be funded.

4. **COMMITMENT TO SERVING THE UNDERSERVED POPULATIONS OF WISCONSIN**

(10 - 20 percent of endowment income)

Wisconsin has many gaps in health care services, knowledge and access. Analyses such as the "Population County Health Check Up" prepared by the Wisconsin Network for Health Policy Research at the UW-Madison highlight the deficiencies in some regions and the particular challenges facing the state. The UW Medical School's strategic priorities are closely aligned with these needs. We are committed to enhancing programs and initiatives to address the needs of underserved urban and rural populations, including the Sovereign Indian Nations.

Each underserved community has unique needs reflecting environmental, demographic, genetic, geographic and other factors. Our established partnerships with other health care and educational organizations prepare us to address the needs of these targeted populations. We plan to increase our outreach efforts by working in collaboration with our many existing partners as well as other local providers and community-based organizations to address the needs of underserved communities. The initial targets in urban areas include women's health with an emphasis on breast cancer and osteoporosis; of women, and improved children's health through enhanced nutrition and greater attention to issues such as asthma, lead toxicity and better prenatal care. In rural areas, we anticipate ~~using partnerships~~ with established organizations such as the Wisconsin Area Health Education Center System to facilitate local solutions for local community health needs.

A much greater understanding is required of the health concerns of certain populations, such as women residing on farms, Native Americans on reservations and minority and economically disadvantaged populations in urban communities. We believe that more epidemiologic research will pay the greatest dividends in understanding and subsequently meeting the needs of these groups. In addition, epidemiologists working for various organizations around the state would benefit from greater coordination and communication of information on the determinants of population health. Consequently, we plan to increase our collaborative activities with colleagues at our Milwaukee and Western (La Crosse) Clinical Campuses, the Marshfield Clinic, and the Great Lakes Intertribal Council, particularly its EpiCenter that is devoted to epidemiologic research. Existing partnerships with UW-Milwaukee and UW-La Crosse will be strengthened as a result of population health initiatives.

Our rural and community health programs will be strengthened through reorganizations providing new and dedicated leadership and by use of the Blue Cross & Blue Shield gift. Of the total funds committed to this "Commitment to Serving the Underserved Populations of Wisconsin," 90 percent will be used for program development and support and the remaining 10 percent for infrastructure.

**Rural Health.** During the statewide assessment process, gaps were identified in rural health programs, infrastructure and leadership. The Medical School is proposing an integrated strategy for enhancement of its rural and community health programs to help address these gaps. Effective leadership is essential to greater achievements in rural health education and research programs. An

Assistant Dean for Rural and Community Health will be recruited during the 1999-2000 academic year to provide program leadership and foster innovation and a Rural and Community Health Advisory Council will be established. In addition, the School's Strategic Plan will be strengthened by incorporating an expanded rural component with goals and objectives developed in collaboration with communities.

- Leadership and Strategic Planning

The Assistant Dean for Rural and Community Health will provide leadership in implementing the Medical School's strategic plan for rural and community health and community educational program development. This Dean will also provide leadership and coordination for the Wisconsin AHEC Statewide Program office of the Wisconsin Area Health Education Center System and its four Regional AHEC Centers and the UW Medical School Office of Rural Health. The Assistant Dean will work closely with the senior leaders at the UW Medical School and other health profession schools to provide coordinated programming for all health professions.

- External Relations/Community Development

The Assistant Dean will be a liaison to key external organizations involved in rural and community health program development, such as the Rural Health Development Council, the Consortium for Primary Care in Wisconsin, the Wisconsin Primary Health Care Association, the Wisconsin Area Health Education Center System Board, the Wisconsin Rural Health Cooperative, and the Wisconsin Health and Hospital Association. Collaborative programming to improve community health, with special emphasis on the needs of rural populations, will be developed with emphasis on improved access to health care and improved community health outcomes.

- Health Professions Education and Training

The UW Medical School will continue to emphasize community and rural health experiences in all aspects of training. The new Assistant Dean will supervise and enhance our already existing programs in rural communities, such as the Preceptorship (8 week requirement for all 4th year medical students), the Summer Externship Program and the community and rural health elective experiences developed by the Wisconsin Area Health Education Center (AHEC) System. Additionally, a rural training track option for third and fourth year medical students will be developed in conjunction with the Wisconsin AHEC and our affiliated regional campuses. The UW Medical School, through its Department of Family Medicine and in conjunction with the Wisconsin AHEC System will add rural training track options at all of its Family Medicine Residency training sites.

**Urban Health.** We plan to develop a Center for Urban Population Health, based on our Milwaukee Clinical Campus, with linkages to other urban sites serving the uninsured and underinsured, such as the existing South Madison Clinic and a new clinic in Beloit. This Center will address unique urban health and community medicine issues, with an initial emphasis on the health needs of key population groups -- women, and children, the aging population, and minorities groups. Outcomes research on Wisconsin's urban, underserved populations, including evaluations of the optimal manner in which to deliver health care in underserved communities will be emphasized. The Center will coordinate with MCW's new Institute, the

Milwaukee Area Health Education Center, the University of Wisconsin-Milwaukee, Aurora Health Care, Milwaukee Health Department, community clinics and other community-based organizations. A new Assistant Dean based in Milwaukee will provide program leadership for the Center for Urban Health and foster innovative approaches to addressing urban health problems.

~~The mission of the Center for Urban Population Health's mission, is to improve urban health through partnerships that address the medical and non-medical contributors to individual and community health, will health. To accomplish this mission be accomplished through, the Center would fulfill the following four essential functions activities:~~

- **Research**

Population health information is vital to the Center. The Center will develop an Urban Health Data Base for Wisconsin that includes individual/patient-specific data from clinical care settings, population-based health data, and data measuring certain determinants of population health (e.g., socioeconomic status) on a population basis. The repository will also house data from representative survey applications. This data base will support the design and management of community-based research and public health/prevention programs in southeastern Wisconsin, but could have statewide application as needed. The Center would assist with research project design, management, and analysis by researchers and planners from the UW Medical School, other universities, health care organizations, and governmental and community agencies.

- **Training**

The Center will coordinate community and population research and clinical training opportunities for future health professionals, including residents and students in medicine, nursing and other allied health professions to ensure appropriate training in the provision of culturally competent care. ~~Appropriately focused~~ rotations would be developed for these students and residents to working side-by-side with community health clinicians, researchers, and community health educators on important urban health issues such as asthma and lead poisoning. ~~Such training, so that they will be prepared~~ the state's future health professionals to provide state-of-the-art health care tailored to the specific needs of the communities they eventually serve. In addition, a preventive medicine/population health fellowship will be established in conjunction with the statewide UW Family Medicine Department to train future medical leaders and practitioners of population health. The Center will sponsor national conferences on topics related to community and population health.

- **Evaluation and Planning**

The Center will not be a direct provider of care; however it will assist clinical managers, health care providers, and community-based organizations in assessing the needs and strengths of the staff and communities served (e.g., effectively targeting resource allocation, site selection and service planning). Best practice models will be developed and promulgated.

- **Prevention/Community Education**  
Successful community health programming must include education and prevention technology and intervention. The Center plans to develop and evaluate the effects of community education on defined populations and broadly disseminate its findings. Furthermore, the Center will assess health risk factors in individuals and groups and suggest appropriate interventions. It will also assess the clinical and public health program needs of specific populations.

5. **DISEASE PREVENTION THROUGH RESEARCH**  
(40 - 60 percent of endowment income)

In response to the great public interest, the obvious needs and the major opportunities, the UW Medical School will use funds from ~~Using the Blue Cross & Blue Shield gift, the UW Medical School will~~ to increase its emphasis on disease prevention, in response to the public's great interest in this area. History has demonstrated that the health status of Wisconsin citizens will improve as a result of new knowledge and a variety of behavioral changes. In the 21<sup>st</sup> Century, prevention will be achieved through a balanced mix of research, education, interventions and lifestyle changes. This new paradigm will build on a growing body of knowledge on human genomics and information technology.

In determining which diseases or population health concerns to emphasize we considered: (a) the results of our recent assessment of ~~the statewide~~ health concerns and priorities of Wisconsin residents and (b) the strengths of our School and its strategic priorities. We found there was considerable overlap in these two categories. For example, the largest group of survey respondents wanted the Blue Cross & Blue Shield gift used for cancer. At the same time, the School has great expertise and other resources in the cancer field and cancer is one of our strategic priorities. As a second example, women's health was frequently cited at the listening sessions, approximately 90 percent of survey respondents said that they were very or somewhat concerned about women's health, and it has been identified as one of the School's strategic priorities.

Priority areas for an enhanced emphasis on prevention include women's health, cancer, cardiovascular diseases, and aging and neurodegenerative diseases (e.g., stroke, Alzheimer's disease, and Parkinson's disease). Our current intent is to provide each priority area with 10-15 percent of the income on the endowment with these funds to be divided between program (80 percent) and infrastructure (20 percent) costs. Our other strategic priority, population and community health, will also be strengthened by a combination of educational program development and a greater emphasis on community-based epidemiology research. This strengthening of population health is described in Section 6.

***Women's Health Research and Statewide Outreach***

As previously noted, women's health was identified as a significant health concern during our recent assessment process. Women's health has evolved over the past decade from a singular focus on reproduction to a broad multi-faceted discipline. Women's health researchers have been among the leaders in promoting a biological/psychological/sociological perspective on

health across the life span. They recognize that a woman's overall health and wellness are dependent not just on biological factors, such as blood pressure, but on the social, cultural and economic environment in which she lives and works. In regard to the latter, studies show that women are more likely than men to be underinsured or uninsured, in part a reflection of differential workforce participation rates. However, this disparity exists even in Wisconsin which has the highest percentage of women in the workforce of any state.

Well designed, thoughtful, critically analyzed research is the heart of understanding how these factors interact to affect health, how men and women differ in their determinants of health and disease (e.g., rheumatologic and bone diseases are far more common in women than in men), and how policy shifts impact the health and survival of woman. Because women's health is intrinsically interdisciplinary, to promote meaningful research in this field, UW-Madison has created a Center for Women's Health and Women's Health Research and has been designated a National Center of Excellence in Women's Health. Nine departments in the Medical School as well as the Schools of Nursing, Pharmacy, Veterinary Medicine, Letters and Science, and Business participate in the Center.

Studies performed by Center-affiliated faculty demonstrate how research provides a natural foundation for education, community outreach, and improved health. For example, a research intervention with the American Indian tribes of Northern Wisconsin decreased teen pregnancies in high risk adolescents and laid the groundwork for a more extensive community health education program as well as a willingness by the tribes to participate in additional clinical research. In another case, a researcher affiliated with the Center has identified institutional and behavioral barriers to obtaining mammograms for Wisconsin women. She tested a behavioral intervention that proved effective with African American, but not white women. Such research has clear implications for policy makers, health educators, and clinicians.

The theme of Women's Health can also be used to refocus existing strong research programs toward new issues. For example, the Colon Cancer Prevention Program is studying why women are not being screened for colon cancer, the third most common cause of cancer death after lung and breast cancer.

The Center for Women's Health and Women's Health Research involves faculty with a broad spectrum of interests, from gender-based biology to epidemiology. The Center's current priorities include:

- Design of analytic studies, such as risk factors for atherosclerosis in women with diabetes, using data from the Women's Health Initiative, a large multi-center study involving 40 sites across the US.
- Investigation into the mental health needs of women including the identification and treatment of postpartum depression, the impact of changing employment patterns, and welfare reform.
- Study of gender-based biology including the biology of menopause and postmenopausal diseases such as osteoporosis, breast cancer and cardiovascular disease.

The Center for Women's Health and Women's Health Research strongly emphasizes ~~places a strong emphasis on~~ dissemination of its research findings. The Center has worked in partnership

with organizations committed to consumer health education for women including devoted to disseminating health information to the women of Wisconsin such as the Wisconsin Women's Health Foundation, the Wisconsin Department of Health and Family Services and Wisconsin Public Television. The Blue Cross & Blue Shield funding will facilitate a strengthening of such academic-community partnerships so that Wisconsin women can benefit quickly from the research findings of investigators. The information technology in our new Health Sciences Learning Center will be key to implementing this distance education objective. Other important elements of women's health research and outreach are described in the following Sections 4 - 6 of this plan.

To complement the research and outreach, educational enhancements at the UW Medical School are also planned. These include the infusion of Women's Health throughout the School's undergraduate medical education curriculum through such means as the development of new multidisciplinary courses and new trans-departmental curricula. In addition, there will be additional opportunities for postdoctoral research and leadership training in Women's Health for MD and Ph.D. scientists.

### *Cancer Research*

Cancer is a major health problem for the people of the state of Wisconsin and a leading cause of premature death. Furthermore, it accounts for well over one-third of the state's health care expenditures. To address this major public health issue, the University of Wisconsin Comprehensive Cancer Center (UWCCC) has made major resource commitments to cancer research, training and patient care.

Discovery is the direct route to continuing improvement in public health. Basic research conducted in University laboratories lay the foundation for clinical and population-based research that translates those discoveries into cancer prevention, earlier diagnosis, and more effective treatment. The Blue Cross & Blue Shield funds will be used to strengthen our human genetics in cancer program. By building on the wealth of information generated by the Human Genome Project, we expect to be able to identify novel therapeutic and diagnostic techniques and pinpoint individuals at high risk of the disease. In addition, we will expand our public education programs to the entire state as a means of increasing awareness of the latest discoveries in cancer prevention and early detection. A key component will be the development of distance learning programs for health professionals throughout Wisconsin to ensure that they have timely access to new knowledge about cancer prevention, diagnosis and treatment.

The research programs of the UWCCC enjoy a rich history and a strong tradition of excellence. Our multidisciplinary research programs span the spectrum from fundamental discovery in the molecular biology and genetics of cancer, through translational animal models and clinical trials, to population-based studies of cancer risk and cancer control. The research is driven by two goals – to prevent cancer and to cure those people unfortunate enough to develop this disease. To best achieve these goals, basic research programs dealing with the genetic basis of cancer and researchers studying the biology of cancer are linked to programs in developmental therapeutics and disease-based multidisciplinary physician groups. This linkage ensures that ideas and new knowledge flow continuously in both directions.

Research discoveries at the UWCCC have laid the foundation for improvements in health care for the people of Wisconsin and the nation. A few of the groundbreaking discoveries made by our faculty include the basic mechanisms by which chemicals cause cancer; the conceptual basis for combination chemotherapy; the development of several novel classes of drugs, including 5-fluorouracil, which is widely used to treat breast, ovarian, stomach, and colon cancers; the use of long-term treatment with the drug tamoxifen to prevent breast cancer in women at high risk for the disease; and the development of new methods to focus radiation therapy to minimize risk to surrounding healthy tissue. More research of this importance will be pursued as a result of the empowering Blue Cross & Blue Shield gift.

~~Discovery is the direct route to continuing improvement in public health. Basic research in our laboratories at the University lays the foundation for the work that will follow to apply these discoveries and make them meaningful for the people of Wisconsin. The importance of cancer research, especially translational and interdisciplinary, is well recognized in the School's strategic plan and is the cornerstone of the future for cancer prevention, care, and cure. The Blue Cross & Blue Shield bequest will serve to accelerate and advance our strategic priorities in cancer.~~

When these research findings are translated into meaningful clinical applications, our clinics become the laboratory to test the effectiveness of the new treatment strategies. Clinical trials are recognized by the scientific community as the best opportunity for patients needing the latest and most effective cancer treatment. National studies have very clearly and repeatedly demonstrated that patients managed in the setting of a research center live longer and with a better quality of life. The public needs to be educated to ~~We must greatly improve the public's~~ understand the understanding of the importance of translational research and the need to participate ~~participation in clinical studies evaluating new treatment strategies. We have already established partnerships in the form of UWCCC regional cancer centers at various Wisconsin locations around the state including Wausau and , Manitowoc, as well as ne-Freeport, Illinois. These centers make our clinical trials readily available to state residents. Our recently established Wisconsin Oncology Network provides another mechanism to~~ also increases access make to clinical trials available to more of our state's population. Expanding these already proven endeavors, in collaboration with MCW where appropriate, in conjunction with improved public understanding will ensure that the benefits of our discoveries reach more people in the state.

~~When~~ As we turn our focus to assessing the impact of risk factors, behavior patterns, and environmental conditions on cancer, the effect of the environment on the consequences of cancer in our state, the population of the entire state becomes our laboratory. The UWCCC partners closely with the state's Division of Health and Human Services to monitor incidence and mortality and identify areas needing more careful assessment. Since 1980 every woman in the state of Wisconsin diagnosed with breast cancer has been invited to participate in a statewide research effort to identify modifiable risk factors for breast cancer. A new study, recently funded by the National Cancer Institute, will examine regional variation in breast cancer in Wisconsin to learn more about possible environmental causes and the potential for prevention.

UWCCC research has shown that Wisconsin's age-adjusted cancer mortality rates have declined since 1990, the first time since cancer statistics have been kept by the state. This public health



achievement has been accomplished by translating science into practice, with improved diets, lower smoking rates, more cancer screening, and better cancer treatment. This progress will continue as the UWCCC works in partnership with public health and health care providers throughout the state.

Cancer control has been identified as a major health priority. However, most communities lack the information and technical resources to address the problem. The UWCCC makes frequent breakthroughs in dietary and physical exercise practices, and screening and early detection for breast, prostate and colorectal cancer that can be readily adapted into public health practice. With additional resources, the UWCCC will work with communities to translate current research in prevention and early detection into accessible public practice. The Wisconsin Women's Health Foundation has identified rural women as an important target for enhanced cancer control efforts, and we look forward to working in partnership with such organizations to benefit underserved populations.

The UWCCC will broaden its public education campaign in cancer prevention and early detection to all Wisconsin communities. Public education programs such as the successful "Meet Me About Breast Cancer" series, that focus on reaching low income and medically underserved and underserved women in Madison with information on early detection and access to screening programs, will be expanded to other communities and adapted for use statewide. These efforts will be facilitated by the development of the electronic "Wisconsin Idea" in our Health Sciences Learning Center.

The UWCCC will expand its professional education programs throughout the state to provide physicians, nurses, health educators and others with the skills ~~and~~ training, ~~and information they~~ needed to access and utilize the latest research advances in cancer prevention, early detection, state-of-the-art cancer treatment and quality of life issues.

~~With the assistance of this bequest, the~~ UWCCC will do what it does best, research on effective methods to reduce the burden of cancer in communities, ~~and with an accelerated pace and with deeper and wider impact.~~ Additional resources will make it possible for the UWCCC to translate these research findings for the public's health so that all Wisconsin residents can benefit from the latest cancer research advances, whether it is new technologies to detect cancer earlier, community access to new clinical trial treatments, ways to improve the lives of cancer patients and survivors, or practical changes that we can make in our daily lives to prevent cancer from ever occurring. Collaborative initiatives with MCW will facilitate these outcomes.

### ***Cardiovascular Research***

Cardiovascular diseases are the leading cause of death in the State of Wisconsin regardless of gender or race. Recent reports show that 45% of deaths in Wisconsin are due to cardiovascular disease, most notably heart failure and sudden death as a consequence of other primary diseases such as atherosclerosis and hypertension. In the past 20 years, considerable progress has been made in treating and preventing these diseases, but grim statistics show that much remains to be done to reduce the devastating impact of these diseases on the lives of our citizens.

Success can only be achieved through basic and clinical research and the rapid translation of research findings into improved prevention and clinical care. We now have a unique opportunity to establish the critical elements of a statewide program in cardiovascular health. Blue Cross & Blue Shield funding will directly result in close collaboration between ~~through collaborative basic and clinical research between the~~ UW Medical School and MCW to address the major problems in cardiovascular research and care. To facilitate this collaboration, faculty at both institutions have proposed the formation of a "Wisconsin Cardiovascular Research Consortium" which would foster collaborative basic and clinical research and assist in the dissemination of subsequent advances to the residents of this state.

Researchers at UW Medical School and MCW have made important contributions to recent advances in understanding diseases of the heart and blood vessels. For example, the now common practice of taking aspirin to reduce the risk of coronary artery disease and heart attack was a direct result of research at the UW showing that aspirin reduced blood clotting and inflammation of coronary arteries. While each school has achieved excellence in its own right, together they are the foremost group of cardiovascular investigators in the nation--the two institutions receive the highest amount of research funding in the nation from the National Heart Lung and Blood Institute. Building on the strengths of our research, we plan to establish statewide programs to speed the translation of new research findings from laboratory to bedside and to provide the best care and prevention to the citizens of our state.

Research in Madison and Milwaukee focuses on leading causes of cardiovascular death: heart failure, high blood pressure, kidney disease, sudden death, and vascular diseases. Leaders at both medical schools are committed to faculty collaboration in complementary research programs building on the collective strengths of both institutions while also minimizing potential duplication of efforts.

At the UW Medical School, we will emphasize the underlying mechanism, the cellular basis, for heart failure and the beneficial effects of chemical intervention in strengthening failing hearts. The consortium and endowment funds will ensure our epidemiological studies and clinical trials encompass the entire state. Two key areas of collaboration between the UW Medical School and MCW are proposed:

- ~~A Clinical Research Network for Epidemiology and Evaluation of New Treatments. This network will benefit the health of our citizens by introducing new treatment and prevention modalities via a statewide network of small to medium sized clinical practices. The Department of Biostatistics and Medical Informatics at UW Madison has internationally recognized expertise in the design, conduct and analysis of cardiovascular clinical trials.~~

Wisconsinites have shown their interest in clinical research by their unusually high participation and compliance in other previous studies. The population is well motivated and well informed about health issues and is very stable in terms of migration, which simplifies evaluation of data, and the population is ethnically and racially diverse. This setting has all the ingredients to be an excellent clinical research laboratory to improve the health of the citizens of Wisconsin, but these resources remain largely untapped.

~~• Basic and Clinical Research Programs Building on Institutional Strengths.~~

~~Collaboration will accelerate discovery and speed translation of research findings into improved care for the citizens of Wisconsin.~~

~~As part of this collaboration, UW Medical School research priorities include:~~

~~• Heart Failure~~

~~Heart failure is a chronic condition that results from an inability of the heart to pump adequate amounts of blood, resulting in dramatic symptoms such as chest pain, breathlessness, fatigue and reduced exercise tolerance. For many patients, these symptoms are debilitating and painful. Heart failure is not a single disease, but is often the result of many serious forms of heart disease including atherosclerosis, uncontrolled hypertension, and diseases of the heart valves. Nearly 50% of all heart failure has no identifiable cause. Heart failure is a progressive, fatal condition with a prognosis as grave as that of advanced cancer and AIDS, but failure affects more Americans than any other disease. Work at the UW Medical School involves studies of the cellular basis for heart failure and the beneficial effects that drugs, such as carvedilol, can have in strengthening failing hearts. UW investigators have been very successful in competing for federal funds to study the basis for heart failure in humans and in animals. Expansion of this work to include fundamental investigations, epidemiology and clinical trials involving the entire state will address one of the most serious public health problems now facing our citizens.~~

~~• Sudden Death~~

~~Another program element that will be advanced and broadened is the area of sudden death. Sudden death from abnormal heart rhythms, or arrhythmias, is a major health problem in Wisconsin and the nation. At the UW, a group of basic scientists and physician researchers study ion channels, the proteins in cell membranes that regulate the electrical activity of heart cells. The aim of these studies is to understand the basis for abnormal cardiac rhythms and to develop treatments for patients experiencing arrhythmias. Our work has already significantly advanced our knowledge of cell function in heart rhythms and has provided insights into causes and treatment of these life-threatening conditions. The Blue Cross & Blue Shield funding will extend this work. This work will be extended to include analysis of genetic risk factors, including gender differences since it is known that cardiac function in women differs from men in important ways. In addition, clinical trials will be ~~and expanded clinical trials involving patients throughout the state.~~~~

~~• Vascular Diseases~~

~~A new initiative in vascular diseases will focus on the genetic and cellular basis of blood vessel diseases. The goal of this program is to better understand the basis of arterial wall disease and to translate research findings to improved clinical care for patients with these diseases. Emphasis will be placed on the processes underlying atherosclerosis, as well as processes underlying fatty plaque rupture that is part of heart attacks. Key features of this initiative are the use of high-resolution imaging techniques to assess changes in arterial wall structure and to identify genetic abnormalities associated with atherosclerosis and heart attack.~~

### ***Aging and Neurodegenerative Diseases***

Clinical care and public health issues in the 21st century will increasingly focus on problems associated with aging. Demographic projections indicate that senior citizens are the most rapidly growing segment of the population of Wisconsin and the rest of the United States. The impact of the baby boom generation and increased longevity will eventually dominate our health care delivery system. By 2010, more than 25 percent of the population will be over 65 years of age. Since women live, on average, about 10 years more than men, the problems associated with aging disproportionately affect women. In addition, women also bear the major responsibility for family health and well-being. Furthermore, many elderly women reside in rural areas where access to health care is problematic. -

The aging of our population has important implications that directly affect clinical care, medical research and health professions and consumer education. ~~Women are especially affected since they outlive men and also assume the major responsibility for family health and well-being.~~ Many diseases have a disproportionate impact on the elderly or even a close, etiologic association with aging. These disorders include cancer, cardiovascular disease, certain respiratory disorders such as chronic obstructive pulmonary disease, visual disturbances that often cause blindness, and neurodegenerative disorders such as Alzheimer's and Parkinson's disease. In recent years, research has begun to concentrate on problems associated with aging. Only limited progress has been made, especially with respect to neurodegenerative disorders.

- Research

In general, research on aging populations can be divided into three categories:

- (1) Biomedical studies in which biological aspects of the aging process are investigated.
- (2) Studies on psychosocial characteristics such as resiliency and the availability of social support needs, and
- (3) Epidemiological investigations to elucidate determinants of health and risk factors associated with morbidity in the aging population.

UW-Madison has six programs that combine research and research training on aging populations. These programs, which are fully committed to training on issues associated with the aging population, are the Institute on Aging, the Wisconsin Alzheimer's Institute, the UW Comprehensive Cancer Center, the Beers-Murphy Clinical Nutrition Center, and the Geriatric Research, Education and Clinical Center (GRECC) at the Middleton VA Hospital. In addition, our Wisconsin Regional Primate Center has a strong emphasis on aging research. Collaborative programs involving the Waisman Center and the Center for Neuroscience have also been initiated. Projects from these centers have generated important new knowledge about resiliency, nutritional factors, immunologic disorders associated with aging, the epidemiology of cancer, and the potential genetic basis for some of these disorders. However, there remain serious questions and gaps in our understanding of the etiology of cancer and neurodegenerative diseases. The latter is especially disconcerting given projections on an alarming increase in the incidence of Alzheimer's disease that were called to our attention during the statewide assessment process.

The Blue Cross & Blue Shield funds will accelerate and broaden our investigation of neurodegenerative diseases, especially Alzheimer's and Parkinson's diseases. With prevention of these disorders as our goal, we will establish an innovative research program founded in cellular and molecular biology, molecular genetics, and pharmacology. A critical mass of new faculty in neurodegenerative diseases will be recruited. We also plan to strengthen the programs of the Wisconsin Alzheimer's Institute in association with the Helen Bader Foundation. This initiative will continue to emphasize statewide development of programs for the early detection of Alzheimer's. The ultimate success of these research discoveries and their translation into clinical practice will depend upon early recognition. Our Wisconsin Alzheimer's Institute is uniquely positioned to provide a statewide network for clinical trials of emerging pharmacologic agents to establish their effectiveness in ameliorating or possibly preventing the memory loss that occurs in this tragic disorder. These efforts will take place in collaboration with MCW's Dementia Research Center. Similar efforts will be made in basic and translational research to elucidate the causes of Parkinson's disease and then to apply these results to early detection and potentially either pharmacological or cell transplantation interventions aimed at a complete cure.

- Education

To support and complement our research initiatives we intend to dramatically broaden our educational, training, and outreach programs in aging. Currently, there are a few training programs such as the National Institute on Aging training grants in the biology and demography of aging as well as a Geriatric Fellowship Program, and the Wisconsin Geriatric Education Center. In addition, our The geriatric medicine program offers training opportunities in collaborative interdisciplinary care available to students in nursing, social work, pharmacy, physical therapy, and occupational therapy.

Despite these offerings, there are significant unmet needs in gerontological training. All adult primary care specialties now require training in geriatrics, and geriatric medicine constitutes a subsection of the Internal Medicine Board. These training requirements, when juxtaposed with the aging of the population, make clear a strong need for expanded geriatrics training in all programs, especially primary care medicine. Training will be coordinated with an expanded preventive medicine fellowship and our statewide family medicine residency described below. This need will be met by increased faculty support.

- Preventive Gerontology

With regard to future directions, the UW-Madison is well poised to establish a major new initiative in preventive gerontology. This initiative will ~~which would~~ utilize knowledge generated by UW researchers to develop multi-level education and training programs for those entering geriatric medicine and allied health fields, including the public health workforce and caregivers ~~those~~ working in community health centers. The broad mission will be to provide state-of-the-art training for health providers and consumers. This would include:

- (1) Basic knowledge of normal aging processes (i.e., what distinguishes normal aging from disease?).
- (2) Strategies for optimal management of chronic health difficulties.

(3) Effective preventive practices (e.g., exercise, nutrition, stress management) that have been linked to delayed ~~shown to delay the onset of later-life morbidities, reduce disabilities, and ultimately, provide longer periods of quality living.~~ Special emphasis will be placed on educating women on aging-related concerns such as the prevention and early diagnosis and treatment of osteoporosis and possible means of prevention and/or early treatment. ~~Such a program would put the Wisconsin Idea to work with a focus on promoting health and well-being among the ever-expanding aging population.~~

### ***Emerging Public Health Priorities***

Health needs are not static. In future years, we anticipate doing prevention-oriented research on health concerns of growing significance. One such concern is asthma which is becoming an increasing problem for many people, particularly members of the minority community. ~~with a disproportionate effect on minority populations.~~ Our basic and clinical research programs in asthma are currently well-funded by federal agencies such as the National Institute of Health. However, extension to molecular genetic strategies and development of more consumer education, involving distance education and other approaches, will be supported through the Blue Cross & Blue Shield gift. Other health needs will likely warrant similar future concern.

## **6. FURTHER DEVELOPMENT OF PUBLIC HEALTH ACADEMIC PROGRAMS (20 - 30 percent of endowment income)**

Public health education, both training professionals and informing the public, will be a major component of our efforts. While this is described below in detail, specific thrusts will include:

- (1) The establishment of an MPH degree accredited by the Council on Education for Public Health.
- (2) A comprehensive state-wide continuing education component for health professionals.
- (3) An MS degree in population health for physicians trained in Family Medicine, Medicine, and Pediatrics.
- (4) Development of an Information Resource to widely collect and disseminate public health related information and data.

The Blue Cross & Blue Shield gift will provide critically needed programmatic and infrastructure support and the information gathered this summer has identified needs and avenues to sharpen and guide the following population and community health sciences initiatives: ~~The Foundation's gift will provide critically needed programmatic and infrastructure support and information gathered this summer has identified needs and avenues to sharpen and guide this initiative. The Population and Community Health Sciences Initiative, in turn, provides an established, carefully considered, population focuses program that constitutes part of the School's response to the Foundation's charge to improve the public's health. The availability of investment income from the Foundation's gift will facilitate the following program enhancements.~~

***Education.*** Comments at the public hearings and other aspects of our assessment identified expansion of the School's population health-related teaching programs as a critically important area. Our response to this need is based on a long background in this area and a network of important associations.

The UW Medical School has trained masters level epidemiologists for many years, a number of whom are currently working in local and state public health agencies in Wisconsin. Also, since the inception of the Preventive Medicine Department forty years ago, the leaders of the State Laboratory of Hygiene have been Department faculty members. Similarly, all the MD and Ph.D. epidemiologists in the Division of Public Health hold adjunct Preventive Medicine faculty appointments and are active teachers in our graduate program. As a result of these long-standing relationships, have allowed our students have access to research opportunities and practical experience in these two major sites of public health activity. The call for greater attention to the graduate and postgraduate training needs of the public health workforce in Wisconsin gives rise to the following plans to augment our training program:

- **Addition of a Public Health Track in Population Health**

We will begin to recruit students specifically interested in public health careers. ~~Added to~~ Our current MS and Ph.D. training program will be expanded to include will be formal experience in public health agencies most particularly the State Laboratory of Hygiene and the Wisconsin Department of Health and Family Services as well as, ~~and also~~ exposure to other public and private health agencies. The thesis or dissertation research required to complete the MS or Ph.D. degrees respectively will be conducted within public health agencies.

- **Assessment of Other Public Health Workforce Needs**

In consultation with our adjunct faculty and other colleagues in the Division of Public Health we will complete an assessment of the other disciplines and personnel needed in the public health sector and the means to address these needs. This will include an examination of the desirability of a MPH degree program and accreditation from the Council on Education for Public Health. The elements for such accreditation (biostatistics, epidemiology, health services administration, environmental health and behavioral sciences) exist within the rich resources of the UW-Madison.

- **Continuing Education for Public Health Professionals**

~~At Our public listening sessions, revealed notable dissatisfaction by mid-career public health~~ professionals expressed strong dissatisfaction with the need to travel to other states ~~to obtain~~ for continuing education. For over a decade the Department of Preventive Medicine has offered the premier distance education MS degree in Administrative Medicine for mid-career clinicians interested in medical management. This combination of experience in distance education within Preventive Medicine, the soon to be realized state-of-the-art distance education technology of the Health Sciences Learning Center, and an outstanding teaching faculty make it possible to provide quality continuing training for public health professionals in a number of fields. This is especially true given our adjunct faculty in the Division of Public Health who already teach in our graduate program. They not only bring a wealth of experience in public health practice but also are all distinguished epidemiology and public health researchers. With this expertise and the additional resources, we will establish a summer leadership institute for public health professionals possibly in collaboration with MCW.

- **Training of Physicians in Population and Community Health**

For many years clinically prepared physicians interested in epidemiology received graduate training in Preventive Medicine. Initially, these were primarily physicians doing specialty training in Geriatrics and Women's Health. Recently, with federal training grant funds secured by the Department of Family Medicine, primary care physicians (family physicians, internists and pediatricians) are now studying for the MS in Population Health. This experience, part of their specialty training, includes a research experience in their clinical disciplines focused on the assessment of community health needs, investigating disease causation and evaluating prevention program effectiveness. The Blue Cross & Blue Shield funds will support expansion of this program.

~~As a result of the assessment process, we also recognized a need.~~ We also plan to expand training to include a preventive medicine fellowship track in cooperation with our statewide, nationally recognized Family Medicine residency. This will be a priority because of its statewide impact on health needs. This program's e-goal focus will be twofold -- is to prepare physicians not only to work in public health agencies but also to provide practicing clinicians with the skills to investigate, analyze and respond to the health needs of their community.

~~We are confident that these enhancements of our training program can be implemented since they build on our expertise and capitalize on long-standing relationships that have been functioning in public and community health training.~~

**Research,** An extensive, population-based research program exists, with a FY 2000 total of \$8 million in training and research funds, including \$7 million from the National Institutes of Health. A number of long-term epidemiologic studies investigating problems important to the public's health are underway in populations throughout the state. They include: (a) medical, cognitive, and social development outcomes in very low birth weight babies followed through the first decade of life, (b) the role of virus infections in the causation of type 1 (insulin dependent) diabetes in children and young adults, its early natural history and the effects of health care on its complications, and (c) the frequency of vision and hearing loss and its effect on quality of life in an older population in Beaver Dam, Wisconsin.

In conjunction with the Division of Public Health, environmental health research includes (a) the evaluation of lead abatement programs in reducing lead exposure in children in Milwaukee (with the Milwaukee Health Department) and other locations in the state, (b) the health effects of eating sport caught fish contaminated with PCBs, mercury and other toxic substances, and (c) the possible human health effects of exposure to stray voltage and electromagnetic fields.

In health services research, major areas of focus include (a) development of methods to accurately measure the health status of populations, (b) assessment of the cost/effectiveness of health care interventions for prevention and early detection of disease, and (c) investigation of the effect of the health delivery systems on the cost and quality of health care. In addition the Department of Family Medicine is a national leader in gaining federal support for community-based research emphasizing cardiovascular disease prevention, prevention of alcohol and substance abuse and cancer prevention in clinical practice.



All of the above research is funded by the National Institutes of Health or other extramural funding sources that reward well developed proposals with a high probability of success in well-defined areas of investigation. Resources from the Blue Cross & Blue Shield endowment will provide needed flexibility to initiate studies in new, less explored areas of population health research such as women's health. These seed funds will enable researchers to develop the primary data necessary to compete successfully for sustained funding at the national level. One new area of particular interest is the consistent association of non-biological/genetic, non-medical factors such as socioeconomic level and educational attainment with population health status even when the major known medical risk factors are controlled for. With collaborators from the University's very strong social science departments, we think it is critical to begin to define the biological changes related to low socioeconomic status and educational attainment. Such information holds important implications for new prevention strategies and policies regarding the allocation of resources to improve the public's health.

### ***Outreach***

- **Public Health Agencies.**

The close association of the UW Medical School with the Wisconsin Department of Health and Family Services and State Laboratory of Hygiene has been noted. Recently a plan has been implemented to strengthen the Preventive Medicine faculty presence in the State Laboratory through joint hires of faculty to replace recent retirements among the Laboratory's leadership. This will increase both training and research opportunities in the state's public health laboratory.

- **Wisconsin Network for Health Policy Research**

This organization was established by the School to encourage and disseminate health services and policy research at the UW-Madison and throughout the state. The Network has established an electronic listserve of more than 300 Wisconsin researchers and policymakers and holds a Wisconsin Health Policy Research Conference every other year. It has produced policy papers in response to requests from governmental and non-governmental agencies on topics such as physician and midwife supply, organ transplantation and information needed to evaluate the quality of health care plans. Network faculty and staff also played key roles in the development of BadgerCare.

The Network's next major project is the development of the Population Health Information Resource for Wisconsin. It is impossible to improve public health and the quality of health care without a much more sophisticated system of data collection and information transfer to public and private sector decision-makers. The purpose of this Information Resource is to collect new data, unify and make more accessible existing public and private data sources, derive global measures of health and health-quality-of-life, and provide more detail on health care status and health resource utilization for small areas of the state. This would be a collaborative effort involving significant partnerships with the UW Center for Demography and Ecology, MCW and the Wisconsin Department of Health and Family Services. This effort, which could be a model for the nation, is an ideal project for the Blue Cross & Blue Shield initiative.

We are currently in the process of relocating the population-focused programs of the Departments of Preventive Medicine, Family Medicine, Medicine, and Pediatrics into a single site at the Wisconsin Alumni Research Foundation (WARF) Building. This relocation is underway, but additional funding is needed for program support and information technology and other infrastructure support. Eventually, the WARF building will house a virtual school of public health.

**7. FUND MANAGEMENT**

*Summary of Initial Plans for Funds Allocation.* As previously noted, the UW Medical School proposes to use up to \$20 million for initial expenditures needed to catalyze the development of prevention-oriented programs and infrastructure responsive to the public’s health needs identified during the recent comprehensive assessment and the School’s strategic priorities. The initial plan for allocation of the initial funds is shown below. More precise allocations will be determined based on program needs and leveraging opportunities. These funds will be allocated as follows:

Development – Program <u>Areas Identified</u> in Sections 4-6 of this Plan	65-70
percent	
Development – Infrastructure Related to <u>Program Areas Identified in</u> Sections 4-6 of this Plan	20-25 percent
Enhancing Community & Rural Health Fund	5-10
percent	

The remainder of the gift will be used as a permanent endowment to be established at the University of Wisconsin Foundation. The funds from this endowment will be allocated as follows:

Enhancing Community & Rural Health Fund	<u>(Section 3)</u>	5 – 10
percent		
Underserved Populations of Wisconsin <u>(Section 4)</u>		10 – 20 percent
Disease Prevention through Research <u>(Section 5)</u>		40 – 60 percent
Public Health Academic Programs <u>(Section 6)</u>		20 – 30 percent

*Role of the University of Wisconsin Foundation.* The Blue Cross & Blue Shield gift will be managed and invested by the University of Wisconsin Foundation. The UW Foundation, established in 1945, is the official fund-raising and gift-receiving agency for the University of Wisconsin-Madison. It is an independent, non-profit, tax-exempt organization with an elected Board of Directors that oversees its assets and activities. Assets under management by the Foundation exceed \$1 billion. Stewardship is a vital component of the UW Foundation’s mission. Foundation staff, working with outside consultants and an investment committee, manage the investment of gift dollars. The original intent and purpose of each gift is carefully stewarded. Partnerships and leveraging are equally important aspects of the Foundation’s work. The UW Foundation views its role with the Blue Cross & Blue Shield United of Wisconsin gift as a public trust, one that will ensure the evolution of the Medical School in the new century and one that will benefit the people of Wisconsin.

The UW Foundation currently distributes 4.75 percent of the fund's income with the income available on a quarterly basis. Interest earnings beyond the 4.75 percent are returned to the endowment to grow the principal. The five year average return on endowed funds, as of June 30, 1999, was 16.62 percent. Through management of the Blue Cross & Blue Shield endowment, the Foundation anticipates preserving, growing and advancing its impact. The UW Foundation will provide a complete Annual Financial & Stewardship Report to the UW Medical School for inclusion in its annual report to Blue Cross & Blue Shield.

*Role of University of Wisconsin-Madison and its Medical School.* The UW-Madison and its Medical School will oversee application and use of the Blue Cross & Blue Shield gift. UW-Madison is a major research university, receiving \$553 million in extramural funds from the federal government, private foundations and other organizations in FY 1999. The Medical School, which is the Madison campus' largest single recipient of external funding, received \$162 million during this period. As such, both the University and its Medical School are experienced in accounting for outside funds and ensuring their appropriate utilization.

Funds from the Blue Cross & Blue Shield gift will be allocated as described in this plan and subsequent revisions to this document (see Section 9). Decisions to fund specific projects will be based on proposals containing specific goals and detailed budgets. Accounting for funds will take place on a project by project basis. Funds will be tracked through the use of specific accounts and awards. The University's policies and procedures on expenditures of funds will apply to all transactions.

## 8. STEWARDSHIP

Stewardship will be the joint responsibility of the Board of Directors of the University of Wisconsin Foundation and the Board of Regents of the University of Wisconsin System. The UW Medical School Dean and the UW-Madison Chancellor will be responsible for ensuring that the intent of this plan is met.

Initiatives supported by the Blue Cross & Blue Shield gift will be required to provide annual reports of expenditures, activities and progress in meeting project goals. The Dean of the Medical School will review these reports. In general, decisions to continue, revise or terminate an initiative funded with the Blue Cross & Blue Shield gift will be made on a two-year budget cycle as part of the Medical School's budget process.

Annual stewardship reports will be prepared. After they are drafted and prior to public distribution, they will be reviewed by the Medical School Advisory Board of Visitors with additional representation from the Department of Health and Family services, minority communities and the UW-Madison Chancellor's office to ensure that the projects funded from this source are in substantial agreement with the Blue Cross & Blue Shield Public Health Foundation's General Purpose Statement and this plan's Principles of Stewardship. These annual reports will be sent to the Blue Cross & Blue Shield Public Health Foundation and to the Blue Cross & Blue Shield United of Wisconsin Board of Directors. In addition, they will be posted on the UW Medical School website. They will contain information on the endowment (e.g., year end balance, appreciation), disbursements to the Medical School, identification of

specific programs receiving support, and specific use of funds by programs including accomplishments and challenges.

A more detailed report will be prepared every five years providing an updated assessment of the state's public health needs, expanded information on communities impacted, collaborations developed, multi-year accomplishments and long term impact, and additional program funding received through leveraging the Blue Cross & Blue Shield gift.

## 9. PERIODIC REASSESSMENT OF STATEWIDE PRIORITIES

The preceding describe our current plans for use of the Blue Cross & Blue Shield gift. We are confident that the 21<sup>st</sup> Century will bring major advances in the treatment of disease and disability. At the same time, new opportunities and challenges are likely to emerge. Consequently, any plan to improve the health of Wisconsin must be periodically reviewed in relation to the changing health needs of Wisconsin's population. After initial approval, we will further develop details for each of our plan areas. They will be reviewed and revised biennially, so that this gift will also serve Wisconsin's future generations by effectively addressing their health care needs and priorities. An "Analysis→Planning→Action→Evaluation Cycle" will be used to ensure that UW Medical School programs and initiatives are appropriately evaluated and goals, objectives and programs modified in response to changing challenges and opportunities.

Every five years, the UW Medical School and MCW will collaborate on a re-assessment of the state's health needs and priorities. As in the process used this summer, this assessment will likely combine an analysis of existing data on health status with public perceptions of needs and priorities. The information derived from this re-assessment will be analyzed, and the schools' plans for use of the Blue Cross & Blue Shield gift will be modified, as necessary, to reflect the changing status and needs of Wisconsin's residents.

## CONCLUSION

*What we have before us now is an unprecedented opportunity, an opportunity created through the vision of Blue Cross & Blue Shield United of Wisconsin. It is an historic opportunity to transform our state's two great medical schools and, in turn, the lives of all Wisconsinites. Healing hands made stronger. Caring hands made more capable. Blue Cross & Blue Shield United of Wisconsin's vision, joined with the creative plans of the two medical schools, must now suffuse the state. We hope to move forward into this new, healthier century, built on the foundations we have laid together.*

*MCW and the UW Medical School have worked cooperatively to develop this plan, and will continue to do so as the process unfolds. Opportunities for future cooperation include fields such as women's health, telemedicine and teleconferencing, and basic research in cardiovascular and other major diseases. Additional collaborations are anticipated, as we work to advance the health of the citizens of the state.*

*This plan will provide Blue Cross & Blue Shield United of Wisconsin with a lasting legacy through its stewards - the Medical College of Wisconsin and the University of Wisconsin Medical School - that will improve health for Wisconsin residents, strengthen community capacity for disease prevention efforts, provide national leadership in public health, and help to find the cure for life shortening and deadly diseases. In short, Blue Cross & Blue Shield United of Wisconsin, through this extraordinary gift, will contribute significantly to alleviating human pain, suffering and illness throughout the state and, indeed, the nation.*

*We look forward to your comments.*

# APPENDIX A

# **ASSESSING THE HEALTH NEEDS OF WISCONSIN**

## **METHODOLOGY**

In July 1999, the Medical College of Wisconsin and the University of Wisconsin Medical School carried out a comprehensive assessment of the health status and needs of the state's diverse population. This assessment was based on a tripartite approach consisting of the following components:

### **Multiple Opportunities for Public Comment**

Members of the public were offered several options for commenting on health needs and use of the Blue Cross & Blue Shield funds. Citizens could attend a listening session (public hearing), call a toll-free phone number, transmit a message by e-mail and/or send a letter by US mail. Press releases outlining these options were sent to the media in all parts of the state. In addition, letters were sent to over 10,000 individuals and organizations including legislators, public health departments, community health centers and clinics, mental, dental and nursing societies and organizations, Chambers of Commerce, Wisconsin non-profit and voluntary health organizations, members of Wisconsin Manufacturers and Commerce, and all Wisconsin companies with 20 or more employees. Advertisements were also placed in local newspapers prior to each listening session giving the date and time of the upcoming listening session as well as information on the other options for providing input.

Listening sessions were held at nine sites throughout Wisconsin during the period from July 6 – July 16, 1999. These sites, which included both urban and rural locations, were held in Stevens Point, DePere, Woodruff, Superior, Janesville, Madison, Milwaukee, La Crosse and Menomonie (See Chart 1 in the body of the report). Each listening session was scheduled for two hours; however, where necessary, sessions were extended to accommodate all who had registered to testify. The listening sessions were attended by more than 500 individuals, with 197 providing oral testimony. President T. Michael Bolger of the Medical College of Wisconsin and Dean Philip Farrell of the UW Medical School were present at all sessions. In addition, staff from the two schools attended and took detailed notes on the testimony.

In addition to the listening sessions, many individuals provided input through the other communication channels provided by the two schools. A total of 216 e-mail messages, 98 voice mail messages, and 121 letters were received. Representatives of the two schools also appeared on a July 19<sup>th</sup> Wisconsin Public Radio call-in show and received input from 15 callers. In addition, two focus group meetings were held. At a legislative briefing on July 7<sup>th</sup> seven legislators and state officials shared their perspectives. A session for the health officers of the Great Lakes Intertribal Council was held on July 19<sup>th</sup>. Finally, MCW and UW faculty (including four schools/colleges on the Madison campus) were invited to submit their recommendations. One hundred eight (108) faculty commented on health needs and offered suggestions for use of the Blue Cross & Blue Shield funds. Discussions were also held with the leadership of three other University of Wisconsin campuses.

## **Survey of a Random Sample of Wisconsin's Population**

We contracted with the St. Norbert College Survey Center, which is unaffiliated with either medical school, to conduct a random survey on public perceptions of the state's health care needs and priorities and recommendations for use of the Blue Cross & Blue Shield funds. This survey allowed us to ascertain the opinions of a representative cross-section of the state's adult population who might otherwise not respond to our request for comments. A structured questionnaire was carefully developed and pilot tested before interviewing began. Respondents were randomly selected among Wisconsin adults aged 18 years and older. The survey was conducted July 17 - July 29, 1999.

## **Analysis of Existing Data on State Health Care Needs**

Considerable data are available on state and local health care needs (see Appendix B for further details). UW-Madison researchers working collaboratively with the Wisconsin Department of Health and Family Services have developed the "Population Check-Up" which provides an analysis of existing mortality and morbidity data by county. In addition, researchers with an extensive familiarity with this data completed an analysis of existing mortality and morbidity data by age (Chart 2 in the body of the report). This information complements the more subjective data gathered through the first two approaches. We are also aware of the progress achieved thus far by the Wisconsin Department of Health and Family Service's "Turning Point" initiative. When this model is completed in December 1999, it should prove a continuing resource in the identification of the state's health care needs.

## **RESULTS**

### **Public Input**

*All Communication Sources.* All communications were reviewed and those sent by non-Wisconsin residents (where information was available to make this determination) were eliminated from further analysis. A database was created with a single record for each identifiable individual. (Note: This process was only partially successful as a number of those responding by phone did not give their name and address and many of those responding by e-mail did not provide their place of residence.) The final database contained 719 records. Because some individuals attended multiple listening sessions or used multiple vehicles for providing input the total number of individual records in the database is less than the total communications received.

The responses were coded in subcategories within the following broad categories:

- *Specific Diseases/Population Health Needs:* Includes responses relating to specific diseases (e.g., cancer, heart disease, infectious/communicable diseases), trauma and injury, environmental health factors, population health needs (e.g., women's health), etc.
- *Accessibility and Availability of Care:* Includes responses relating to the needs of specific groups (e.g., the uninsured and the underinsured, those living in rural and urban underserved



areas), specific services which are deemed in short supply (e.g., support services for senior and disabled citizens), etc.

- **Prevention/Wellness/Healthy Lifestyles:** Includes responses relating to health promotion/disease prevention in general, specific programmatic areas (e.g., tobacco control, fitness and nutrition), health education for the public, etc.
- **Public Health:** Includes responses relating to education for public health professionals (e.g., Leadership institute, school of public health), financing, public health research/assessment, etc.
- **Education and Training of Health Care Professionals:** Includes responses relating to workforce development in general, education of physicians, nurses and other allied health providers, the Wisconsin Area health Education Center System, distance learning, etc.
- **Research:** Includes responses relating to support for research in general, clinical trials, etc.
- **Collaborative Relationships:** Includes responses relating to support for collaborative relationships with a wide variety of community-based and other organizations, etc.
- **Funding and Conversion Issues:** Includes responses dealing with general uses of the funds (e.g., support for creation of endowments, statewide use of the funds, grants to community-based organizations, statewide impact), conversion issues (e.g., Blue Cross & Blue Shield decision making), etc.
- **Other Responses.**

Many individuals identified multiple needs and/or offered multiple suggestions for use of the Blue Cross & Blue Shield funds. Consequently, the following analyses are based on a total of 1869 responses.

As Table A-1 indicates, no single health concern was endorsed by a majority of respondents. The category receiving the most support, **Specific Diseases/Population Health Needs**, accounts for only 24 percent of responses. Within this category, women's health, Alzheimer's/aging, mental health, infant and childhood diseases and diabetes were the most frequently mentioned health care needs.

The following four areas each accounted for 13-15 percent of responses:

- **Research.** Support was expressed for additional research on the various diseases and other disabling conditions that adversely affect the health of the population.
- **Prevention/Wellness/Healthy Lifestyles.** Respondents urged greater attention be paid to health promotion and disease prevention. Within this category, they emphasized health promotion in general, more public education and various aspects of fitness and nutrition.

**Table A-1**

**Concerns Identified During Public Input Process  
Total for the Entire Process and by Different Communication Vehicles**

	<b>Total</b>	<b>Listening Sessions</b>	<b>Mail</b>	<b>Phone</b>	<b>E-Mail</b>	<b>UW/MCW Faculty</b>
<b>Specific Diseases/Population Health Needs</b>	24%	17%	19%	31%	37%	19%
<b>Research</b>	15%	7%	10%	20%	29%	17%
<b>Prevention/Wellness/Healthy Lifestyles</b>	14%	14%	14%	16%	9%	16%
<b>Accessibility/Availability of Care</b>	13%	15%	17%	10%	9%	14%
<b>Funding/Conversion Issues</b>	13%	21%	18%	8%	7%	4%
<b>Education/Training of Health Care Professionals</b>	8%	8%	6%	6%	5%	17%
<b>Public Health</b>	7%	10%	9%	8%	2%	5%
<b>Collaborative Relationships</b>	4%	6%	6%	0%	2%	2%
<b>Other</b>	2%	1%	1%	2%	2%	7%

**Note:** Totals may not equal 100 percent due to rounding.

**Results based on:**

**Total:** 1869 responses from 719 individuals

**Listening Sessions:** 653 responses from the 197 individuals who provided oral testimony

**Mail:** 289 responses from 121 letters

**Phone:** 174 responses from 98 voice mail messages

**E-Mail:** 452 responses from 216 e-mail messages

**UW/MCW Faculty:** 270 responses from 108 faculty

- **Funding and Conversion Issues.** Respondents were particularly interested in grants for community-based organizations, having the schools create endowments for the funds rather than exhausting them in a short period of time, and aspects of the Blue Cross & Blue Shield conversion process, such as the composition of the Foundation board.
- **Accessibility and Availability of Care.** Concerns were expressed about the uninsured and the underinsured, as well as rural and urban health needs.

In addition, 8 percent of responses called for investments in the Education/Training of Health Care Professionals. Public Health responses amounted to 7 percent of the total with particular interest in public health financing and continuing education opportunities for public health professionals.

The preceding was a summary of input from all sources. This summary, however, masks qualitative and quantitative differences in the various types of communications received. We are aware that certain health advocates organized support for their particular concern. For example, supporters of endometriosis research conducted an extensive e-mail campaign, advocates of diabetes research used the voice mail option, and proponents of Alzheimer's and women's health attended each listening session. The following sections discuss the results by each communication vehicle.

*Listening Sessions.* As previously noted, 197 people testified at the listening sessions, many representing health care related organizations. Coding of this testimony yielded 653 responses.

The largest group of responses dealt with Funding/Conversion Issues, and they amounted to 21 percent of the total. The majority of those testifying were representatives of organizations, and they were particularly interested in grants to community-based organizations, creation of a permanent endowment, and various issues associated with the conversion process itself. Concerns about the conversion process were particularly frequent at the listening session held in Madison.

More than 17 percent of responses related to Specific Diseases/Population Health Needs, with women's health and Alzheimer's/aging the most frequently mentioned. The importance of Prevention/Wellness/Healthy Lifestyles accounted for 14 percent of responses. Within this category, respondents stressed the need for greater emphasis on prevention in general and the importance of educating the public on health promotion. Ten percent of responses dealt with Public Health. Education of public health professionals and public health financing were of greatest interest to this group of respondents. The categories of Education/Training of Health Care Professionals, Research and Collaborative Relationships each accounted for less than 8 percent of responses.

*Mail.* One hundred twenty one (121) letters were received with coding of these letters yielding 289 responses. Support for Specific Diseases/Population Health Needs accounted for 19 percent of responses, with mental health and women's health mentioned most frequently. A similar percentage (18 percent) commented on Funding/Conversion issues, with support again most frequent for grants to community-based organizations and creation of a permanent endowment.

Seventeen percent of responses dealt with the Accessibility/Availability of Care, particularly the needs of the uninsured and the underinsured and the importance of providing support services for senior and disabled citizens. Fourteen percent of responses focused on Prevention/Wellness/Healthy Lifestyles. As before, respondents stressed the need for greater emphasis on health prevention in general and the importance of health education for the public. Similar numbers of responses (9-10 percent) dealt with the need for more Research and Public Health initiatives.

*Phone.* Ninety-eight (98) voice mail messages were received with coding of these phone calls yielding 174 responses. Many of these responses focused on Specific Diseases/Population Health Needs (31 percent) and Research (20 percent). Sixteen percent of responses voiced support for Prevention/Wellness/Healthy Lifestyles with particular emphasis on fitness and nutrition and healthy lifestyles in general. Ten percent of responses dealt with Accessibility/Availability of Care, particularly for the uninsured and underinsured. The categories of Public Health, Funding/Conversion issues, and Education/Training of Health Care Professionals each accounted for approximately 6-7 percent of responses.

*E-Mail.* Two hundred sixteen (216) e-mail messages were received and the coding of these messages yielded 452 responses. In a pattern similar to the phone messages, Specific Diseases/Population Health Needs comprised the largest category (37 percent) followed by research (29 percent). These results reflect, in part, exceptionally strong support for research on endometriosis. Also garnering approximately 9 percent of responses were concerns about the Accessibility/Availability of Care particularly in relation to the uninsured and the underinsured, and the importance of Prevention/Wellness/Healthy Lifestyles, both in general and in relation to increased availability of health education for the public. Finally, 7 percent of respondents commented on Funding/Conversion issues, and particularly the desirability of providing grants to community-based organizations.

*Faculty.* The 108 proposals from MCW and UW-Madison faculty yielded 270 responses. Faculty were most supportive of addressing Specific Diseases/Population Health Needs (19 percent), particularly those affecting infants and children. A slightly smaller percentage (17 percent) emphasized Research and also Education/Training of Health Care Professionals, particularly in relation to medical education. Sixteen percent endorsed Prevention/Wellness/Healthy Lifestyles, again with an emphasis on health promotion and disease prevention in general and increased health education for consumers. Finally, 14 percent expressed concern about the Accessibility/Availability of Care, particularly for the urban underserved.

## Survey

A random survey of a sample of the Wisconsin population was conducted using an original questionnaire developed collaboratively by the two medical schools and the St. Norbert College Survey Center. The questionnaire asked respondents to indicate their level of concern about specific diseases and population health needs, evaluate the importance of several activities in the prevention of illness, and provide specific suggestions for use of the Blue Cross & Blue Shield funds.

The population for this study was all adult citizens aged 18 and older residing in the state of Wisconsin. A random-digital sample was obtained from Genosys sampling. This strategy provides a representative sample of all telephone households in the state. Respondents were selected from among all adults within each household using the Trol Dahl-Carter random selection technique to ensure that all would have an equal chance of being interviewed. Telephone surveys were conducted between July 16-29, 1999. Interviews were conducted during the evening and daytime hours on each day of the week, with the exception of Friday and Saturday evenings. At least 12 attempts on different days and at different times were made to contact someone at each household. A total of 451 interviews were completed, assuring a margin of error at  $\pm 4.6$  percent at the 95 percent confidence interval. The sample included 49 percent males and 51 percent females. Forty percent of respondents resided in rural areas, 33 percent in the suburbs and 25 percent in urban areas. Age categories and total family income distribution were similar to that expected for the state of Wisconsin.

Survey results reveal a significant level of concern with health issues (Table A-2). Of the specific diseases identified in the survey, respondents expressed greatest concern about cancer (75 percent), stroke and other neurological disorders (59 percent), infectious diseases (55 percent), heart disease, including hypertension and heart attacks (52 percent), mental health (48 percent), and childhood diseases (47 percent). Other areas of concern included aging issues such as Alzheimer's disease and osteoporosis, orthopedic and rheumatologic diseases such as arthritis, environmental factors such as lead, prenatal care, and respiratory conditions such as emphysema, bronchitis and asthma. Women's health was identified by 89 percent of respondents asked to rate specific categories of concern to them.

Health care delivery issues were also of significant concern to respondents. Eighty-six percent identified quality of health care as a major concern, with 80 percent similarly categorizing accessibility of care.

A total of 90 percent expressed concern about the prevention of illness. Approximately 80 percent of respondents judged the training of physicians and other health providers, research about the prevention, causation and treatment of disease, and health education to be very important in the prevention of illness.

When told about the proposed gift from Blue Cross & Blue Shield, and asked how the two medical schools should "spend this money," the respondents were particularly interested in cancer (31 percent), health education (13 percent) and a variety of specific diseases such as Alzheimer's (3 percent) and heart problems.

### **Analysis of Existing Data**

There is considerable existing data on the health status and needs of Wisconsin's population. Using this data to answer the question, "What are the most important public health problems in Wisconsin?" can yield different answers depending on one's perspective. State and local public health officials often list issues of great public concern such as AIDS, environmental health, or health care for the poor. Health care providers, recognizing that people often equate being

**Table A-2**

**Statewide Health Concerns Survey  
Preliminary Results**

<b>Major Health Concerns</b>	<b>% Very/Somewhat Concerned</b>
Prevention of Illness	90%
Women's Health	89%
Quality of Health Care	86%
Aging issues such as Alzheimer's	84%
Accessibility of Health Care	80%
Trauma	78%
Orthopedic/Rheumatologic Disorders	76%
Cancer	75%
Environmental factors	73%
Prenatal Care	73%
Respiratory conditions	66%

<b>Importance to Prevention of Illness</b>	<b>% Very Important</b>
Training physicians	82%
Research	80%
Education of Public	78%

<b>Recommendations for Schools' Use of Blue Cross Funds</b>	
Cancer	32%
Health Education	13%
AIDS	3%
Alzheimer's	3%
Health Insurance	3%
Heart Problems	3%

disease-free to having good health, usually rank diseases that are prevalent among the patients they treat, such as cancer, heart disease, or diabetes. Social service agencies mention the types of problems addressed by their agencies, such as mental illness and alcoholism. Finally, advocacy groups rank highest the issues that affect specific populations, such as women's health and aging.

More objective measures have been used to rank public health, including rates of mortality, hospitalization, or doctor visits. Recently, additional methods have been used to measure burden, such as disability-adjusted life years, that account for quality of life. One approach that is widely used involves examining major health concerns through the life cycle. This approach avoids placing a value on health problems related to age and accounts for changing health issues throughout life. Examples of leading health problems by age and prevention strategies appear in Chart 2 in the body of the report.

Recently, the Wisconsin Network for Health Policy Research issued its "Wisconsin County Population Health Check-Up." The Check-Up uses several measures to rank Wisconsin counties from healthiest to least healthy. For example, Taylor County has the lowest mortality rate while Menomonee County has the highest.

More information on assessment of health needs will be presented in an upcoming issue of the *Wisconsin Medical Journal* to be published in fall 1999.

## **APPENDIX B**



# SUMMARY OF SELECTED DATA ON WISCONSIN'S HEALTH

## 1.1 Adolescent Health Including Teen Pregnancy

### Wisconsin Demographics

#### Births

Births By Teen Age Group And Selected City Of Residence  
 Births To Teens By Age Group And County Of Residence  
 Births To Teens By Age Group And Race/Ethnicity  
 Births To Teens By Age, Mother's Race And County Of Residence  
 Births To Teens By Marital Status  
 Births To Unmarried Teens By Age And County Of Residence  
 Teen Birth Rates, Est. Pregnancy Rates By Age, County Of Resid.  
 Teens Receiving 1st Trimester Prenatal Care By Age Group  
 Wisconsin Teen Birth Rate Vs. National, 1991 - 96  
     by age group  
     by race

DHFS: Births to Teens in Wisconsin, 1997  
 DHFS: Births to Teens in Wisconsin, 1997  
 DHFS: Births to Teens in Wisconsin, 1997  
 DHFS: Births to Teens in Wisconsin, 1997  
 DHFS: Births to Teens in Wisconsin, 1997  
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 DHFS: Births to Teens in Wisconsin, 1997  
 DHFS: Births to Teens in Wisconsin, 1997  
 National Vital Statistics Repts, Vol. 47, No. 19

## 1.11 Mental Health

### Healthy People 2000

#### National Objective

Mental Health

Healthy People 2000 Review, 1998-99

## 1.13 Sexually Transmitted Diseases

### Specific Illnesses/Conditions

#### Sexually Transmitted Diseases

##### Chlamydia

By State And Region, 1993 - 97  
 In Selected Cities >200,000, 1997  
 Ranked By State And Region, 1997

STD Surveillance, 1997, Natl. Summary Tables

##### Congenital Syphilis

In Infants <1 In Selected Cities, 1997  
 In Infants <1 Ranked By State, 1997

STD Surveillance, 1997, Natl. Summary Tables

##### Early Latent Syphilis

By State, 1993 - 97  
 In Selected Cities >200,000 '93 - 97

STD Surveillance, 1997, Natl. Summary Tables

##### Gonorrhea

In Selected Cities >200,000, 1997  
 Ranked By State, 1997

STD Surveillance, 1997, Natl. Summary Tables

##### Primary And Secondary Syphilis

In Selected Counties, 1997  
 Ranked By State, 1997

STD Surveillance, 1997, Natl. Summary Tables

Selected Cities >200,000, 1997

STD's reported by state health departments  
 Syphilis

STD Surveillance, 1997, Natl. Summary Tables  
 STD Surveillance, 1997, Natl. Summary Tables

All Stages By State, 1993 - 1997  
Selected Cities >200,000, 1993 - 1997

**Behavioral Risk Factors**  
Behavioral Risk Factor  
Sexual Behavior

Center For Disease Control

**Healthy People 2000**  
National Objective  
Sexually Transmitted Diseases

Healthy People 2000 Review, 1998-99

**1.14 Neurological Disorders**  
**Wisconsin Demographics**  
Deaths  
Stroke Death Rates By Selected Age Group And Sex

DHFS: Wisconsin Deaths, 1997

**1.15 Trauma and Injuries**  
**Wisconsin Demographics**  
Deaths  
All Injuries, 1993 - 1996  
Motor Vehicle, 1995 - 1996  
Suicide, 1993 - 1996

Center for Disease Control  
Center for Disease Control  
Center for Disease Control

**Behavioral Risk Factors**  
Behavioral Risk Factor  
Adult Safety Belt Usage  
Injury Control/Child Safety

Center for Disease Control  
Center for Disease Control

**Healthy People 2000**  
National Objective  
Unintentional Injuries

Healthy People 2000 Review, 1998-99

**1.16 Women's Health**  
**Behavioral Risk Factors**  
Behavioral Risk Factor  
Breast Exam  
Mammogram And Breast Exam  
Mammography

Center for Disease Control  
Center for Disease Control  
Center for Disease Control

**Healthy People 2000**  
National Objective  
Maternal and Infant Health

Healthy People 2000 Review, 1998-99

- 1.18 Infectious/Communicable Diseases**  
**Specific Illnesses/Conditions**  
AIDS  
 AIDS Monthly Surveillance Summary (State/County/Region), 1998  
 HIV In Wisconsin (Cumulative, 1981 - 1996) DHFS  
 AIDS Action Council
- Behaviorial Risk Factors**  
Behaviorial Risk Factor  
 AIDS Knowledge/Attitudes Center for Disease Control
- Healthy People 2000**  
National Objective  
 HIV Infection Healthy People 2000 Review, 1998-99
- 1.2 Alcohol And Drug Abuse**  
**Behaviorial Risk Factors**  
Behaviorial Risk Factor  
 Alcohol Consumption Center for Disease Control
- Healthy People 2000**  
National Objective  
 Substance Abuse Healthy People 2000 Review, 1998-99
- 1.3 Alzheimer's and Aging in General**  
**Wisconsin Demographics**  
Deaths  
 Death Rates For Alzheimer's Disease By State, 90 - 96 Natl. Vital Statistics Rept, Vol. 47, June 30, 1999
- 1.4 Asthma And Other Respiratory Conditions**  
**Specific Illnesses/Conditions**  
Asthma  
 Self-Reported Prevalence, 1998  
 Surveillance For Asthma, 1960 - 1995 Center for Disease Control  
 Center for Disease Control
- 1.5 Cancer**  
**Wisconsin Demographics**  
Deaths  
 Cancer, 1995  
 Deaths (all cancers), 1995  
 Malignant Neoplasm (Cancer) Rates By Age And Sex  
 Wisc: Chronic Diseases and Their Risk Factors  
 DHFS: Wisconsin Deaths, 1997
- General Demographics  
 Actual And Expected New Cancer Cases By Site, 1996 DHFS
- Specific Illnesses/Conditions**

**Cancer**

Cancer burden in Wisc.(lung, colorectal, breast, prostate) '99  
Health Counts in Wisconsin, Cancer, 1996

State of Wisconsin  
DHFS  
DHFS

Wisconsin Cancer Incidence and Mortality, 1996

- number and age-adjusted cancer cases, site group And sex
- number and age-adjusted cancer deaths by site group, sex
- number and age-adjusted cancer deaths, site group, region
- number and age-adjusted cancer deaths/site/populous county
- number and age-adjusted cancer rate/site, populous county
- number and age-adjusted rate of cancer, major site and region
- number and percent cancer deaths by site group, race, females
- number and percent of cancer cases by site group and race, males
- number and percent of cancer cases by site group/race/females
- number and percent of cancer deaths by site group And race, males
- average years of life lost due to cancer, site group, females
- average years of life lost due to cancer, site group, males
- cancer cases and deaths by site, females
- cancer cases and deaths by site, males
- number of cancer cases in lg. Cities, surrounding counties by site group
- number of deaths, avg. number of months bet. diagnosis And death, disease stage
- number of deaths, avg. number months bet. diagnosis And death, age at diagnosis
- number of cancer deaths by site group, age and sex
- number of cancer cases by site group, age and sex
- number of cancer deaths by race, age and sex
- number of cancer cases by site group and county of residence
- number of cancer deaths, site group, county of residence
- number and percent of cancer cases by site And sex

**Miscellaneous**

**Reports Available By County/DHFS Region**

Actual And Expected New Cancer Cases By Site

DHFS

**Behavioral Risk Factors**

**Behavioral Risk Factor**

Cervical Cancer

Colorectal Cancer Screening

Center for Disease Control  
Center for Disease Control

**Healthy People 2000**

**National Objective**

Cancer

Healthy People 2000 Review, 1998-99

**1.6 Diabetes**

**Wisconsin Demographics**

**Deaths**

Diabetes, 1995

Death Rates By Sex And Race, 1995

Wisc: Chronic Diseases and Their Risk Factors

**General Demographics**

Hospitalizations For Chronic Cond., Secondary  
Diagnosis Of Diabetes 1996

DHFS

<b>Miscellaneous</b>	
<b><u>Reports Available By County/DHFS Region</u></b>	
Hospitalizations For Chronic Cond., Secondary Diagnosis Of Diabetes 1996	DHFS
<b>Behavioral Risk Factors</b>	
<b><u>Behavioral Risk Factor</u></b>	
Diabetes Awareness	Center for Disease Control
<b>Healthy People 2000</b>	
<b><u>National Objective</u></b>	
Diabetes And Chronic Disabling Conditions	Healthy People 2000 Review, 1998-99
<b>1.7 Environmental Factors</b>	
<b>Specific Illnesses/Conditions</b>	
<b><u>Lead-based Paint</u></b>	
Lead-Based Paint Studies In Milwaukee	Environmental Protection Agency
<b>Environmental Issues</b>	
<b><u>Water Quality</u></b>	
Establishment Of Drinking Water Standards Surface Water Quality	UW-Extension Environmental Protection Agency
<b>Healthy People 2000</b>	
<b><u>National Objective</u></b>	
Environmental Health	Healthy People 2000 Review, 1998-99
<b>1.8 Heart Disease</b>	
<b>Wisconsin Demographics</b>	
<b><u>Deaths</u></b>	
Cardiovascular Disease, 1995	
Deaths (CVM, Ischemic Heart And Stroke) 1995	Wisc: Chronic Diseases and Their Risk Factors
Wisconsin Deaths vs US Deaths, 1995	
Heart Disease Death Rates By Selected Age Group	DHFS: Wisconsin Deaths, 1997
<b>Behavioral Risk Factors</b>	
<b><u>Behavioral Risk Factor</u></b>	
Cholesterol Awareness/Screening Hypertension Awareness/Screening	Center for Disease Control Center for Disease Control
<b>Healthy People 2000</b>	
<b><u>National Objective</u></b>	
Heart Disease And Stroke	Healthy People 2000 Review, 1998-99
<b>1.9 Infant and Childhood Disease</b>	

**Wisconsin Demographics**

**Births**

**Births By Birthweight And Selected Characteristics**

**Congenital Anomalies**

**Live Birth Order**

**Prematurity**

**Type Of Delivery**

**Selected Birth Indicators**

**Birthweight**

**Congenital Anomalies**

**Wisconsin Low Birthweight Vs. National, 1997**

**Wisconsin Very Low Birthweight Vs. National, 1997**

**Deaths**

**Deaths: Infant, Neonatal, Fetal And Perinatal, 1980 - 1997**

**Deaths: Infant, Neonatal, Fetal And Perinatal Characteristics**

**Age Of Mother**

**Birthweight**

**Education Of Mother**

**Marital Status**

**Plurality**

**Race Of Mother**

**Sex Of Infant**

**Wisconsin Infant/Neonatal Vs. National Causes Of Death, 1997**

**General Demographics**

**Infant Health**

**People 2000**

**National Objective**

**Maternal And Infant Health**

DHFS: Wisconsin Births And Infant Deaths

DHFS: Wisconsin Births And Infant Deaths

National Vital Statistics Repts, Vol. 47, No. 19

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DHFS: Wisconsin Births And Infant Deaths

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National Vital Statistics Repts, Vol. 47, No. 19

1997 (Health Counts in Wisconsin),DHFS

Healthy People 2000 Review, 1998-99

**2.0 Access/Availability of Care**

**Access to Healthcare**

**Access to Healthcare**

**Wisconsin children's access to health care, 1996**

**Insurance**

**Health Insurance**

**Health Insurance: Linked To Unemployment, State Regs, Prices**

**HPSA: Wisconsin HPSA List By County And Type**

**Uncompensated Health Care, FY 1996**

DHFS

CDC, BRFSS Summary Data

Urban Institute

HPSA

DHFS: Estimated Uninsured

**2.1 Uninsured and Underinsured Including Free Clinics**

**Access to Healthcare**

**Insurance**

**Number And Proportion Without Health Insur. By Region**

DHFS: Estimated Uninsured

**2.12 Senior and Disabled Citizens Support Services**

**Wisconsin Demographics**

General Demographics

# Enrolled In Comm. Options And Medicaid Waiver By Age, 1996	DHFS
Number Home Health Recipients With Chronic Health Cond, 1996	DHFS
Number Of Publicly-Funded Residents Of CBRF's , 1996	DHFS
Number Of Residents In Facilities For The DD, Selected Years	DHFS
Number Of Residents Of Skilled Nursing Facilities, 1996	DHFS
Nursing Home Survey, 1997	Census Bureau

**Specific Illnesses/Conditions**

Physical Disabilities

Brief State-Wide Profiles Of Selected Disabilities	DHFS
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Disabilities Among Native Americans

Emergent Disabilities, Native Americans	University of Chicago
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**Miscellaneous**

Reports Available By County/DHFS Region

Number Home Health Recipients With Chronic Conditions, 1996	DHFS
Number Of Publicly-Funded Residents Of CBRF's , 1996	DHFS
Number Of Residents In Facilities For The DD, Selected Years	DHFS
Number Of Residents Of Skilled Nursing Facilities On 12/31/99	DHFS

**2.4 Dental Care**

**Behavioral Risk Factors**

Behavioral Risk Factor

Oral Health	Center for Disease Control
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**3.1 Prevention/Wellness/Healthy Lifestyles**

**Wisconsin Demographics**

Births

Births by age of mother	DHFS: Wisconsin Births And Infant Deaths
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Prenatal Care

Smoking

Births By Birthweight And Selected Characteristics	DHFS: Wisconsin Births And Infant Deaths
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Mother Smoking

Number Of Prenatal Visits

Trimester Prenatal Care Began

Births By Mother's Race/Ethnicity And Selected Characteristics	DHFS: Wisconsin Births And Infant Deaths
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Prenatal Care

Smoking

Selected Birth Indicators	DHFS: Wisconsin Births And Infant Deaths
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Prenatal Care

Deaths

Deaths: Infant, Neonatal, Fetal And Perinatal Characteristics	DHFS: Wisconsin Births And Infant Deaths
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Prenatal Care

Smoking

**Behavioral Risk Factors**

**Behavioral Risk Factor**

**Health Status**

**Overweight**

**Physical And Mental Health**

**Center for Disease Control**

**Center for Disease Control**

**Center for Disease Control**

**Healthy People 2000**

**National Objective**

**Clinical Preventive Services**

**Healthy People 2000 Review, 1998-99**

**3.2 Fitness/Nutrition Including Hunger and Agri-chemicals**

**Healthy People 2000**

**National Objective**

**Nutrition**

**Healthy People 2000 Review, 1998-99**

**3.3 Tobacco Control**

**Specific Illnesses/Conditions**

**Tobacco**

**Burden Of Tobacco In Wisconsin**

**DHFS**

**Miscellaneous**

**Reports Available By County/DHFS Region**

**Burden Of Tobacco Report**

**DHFS**

**Behavioral Risk Factors**

**Behavioral Risk Factor**

**Smokeless Tobacco**

**Smoking Status**

**Center for Disease Control**

**Center for Disease Control**

**Healthy People 2000**

**National Objective**

**Tobacco**

**Healthy People 2000 Review, 1998-99**

**3.4 Public Education and Information**

**Healthy People 2000**

**National Objective**

**Educational And Community-Based Programs**

**Healthy People 2000 Review, 1998-99**



<p><b>3.5 Vaccination and Immunization</b>  <b>Behaviorial Risk Factors</b>  <u>Behaviorial Risk Factor</u>  Immunizations  Immunizations By Metro Area, 1995  Immunizations Coverage By State, 1995</p> <p><b>Healthy People 2000</b>  <u>National Objective</u>  Immunizations And Infectious Diseases</p>	<p>Center for Disease Control  Center for Disease Control  Center for Disease Control</p> <p>Healthy People 2000 Review, 1998-99</p>
<p><b>3.6 Domestic and Child Abuse</b>  <b>Specific Illnesses/Conditions</b>  <u>Child Abuse</u>  Child Abuse Profile, 1998  <b>Reports On Specific Area</b>  <u>Milwaukee County</u>  Family Violence</p>	<p>Children's Defense Fund</p> <p>Milwaukee Academy of Medicine</p>
<p><b>3.7 Other</b>  <b>Wisconsin Demographics</b>  <u>General Demographics</u>  Percent Of Adults With Behavior Risks By Age, 1990 -1996  Behavioral Risk Factors, 1997</p> <p><b>Miscellaneous</b>  <u>Reports Available By County/DHFS Region</u>  Percent Of Adults With Selected Behavioral Risks, By Age</p> <p><b>Behaviorial Risk Factors</b>  <u>Behaviorial Risk Factor</u>  Selected Factors For Wisconsin Vs. Nation, 1996  Wisconsin Residents Reporting Selected BRFSS Risk Factors  Wisconsin Summary, 1997</p> <p><b>Healthy People 2000</b>  <u>National Objective</u>  Family Planning  Food And Drug Safety  Occupational Safety And Health  Surveillance And Data Systems</p>	<p>DHFS  DHFS</p> <p>DHFS</p> <p>Wisconsin Behavioral Risk Factor Survey, 1996  Wisc: Chronic Diseases and Their Risk Factors  Wisc: Chronic Diseases and Their Risk Factors</p> <p>Healthy People 2000 Review, 1998-99  Healthy People 2000 Review, 1998-99  Healthy People 2000 Review, 1998-99  Healthy People 2000 Review, 1998-99</p>

<b>3.8 Domestic and Child Abuse</b>	
<b>Healthy People 2000</b>	
<b><u>National Objective</u></b>	
Violent And Abusive Behavior	
Healthy People 2000 Review, 1998-99	
<b>Uncoded</b>	
<b>Wisconsin Demographics</b>	
<b><u>Births</u></b>	
Births By Age Of Mother And Selected Characteristics	DHFS: Wisconsin Births And Infant Deaths
Attendant At Birth	
Education	
Live Birth Order	
Marital Status	
Plurality	
Births By Birthweight And Selected Characteristics	DHFS: Wisconsin Births And Infant Deaths
Age Of Mother	
Education Of Mother	
Marital Status	
Plurality	
Race/Ethnicity Of Mother	
Births By County Of Residence (1980 - 1997)	DHFS: Wisconsin Births And Infant Deaths
Births By Mother's Race/Ethnicity And Selected Characteristics	DHFS: Wisconsin Births And Infant Deaths
Age	
Live Birth Order	
Marital Status	
Place Of Birth	
Selected Birth Indicators (1980 - 1997)	DHFS: Wisconsin Births And Infant Deaths
Birth Order	
Wisconsin Births To Single Mothers Rate Vs. National, 1997	National Vital Statistics Repts, Vol. 47, No. 19
By Race	
<b><u>Deaths</u></b>	
Deaths And Death Rates By Age And Sex 1997	DHFS: Wisconsin Deaths, 1997
Deaths And Death Rates For Selected Years	DHFS: Wisconsin Deaths, 1997
Deaths By County Of Residence	DHFS: Wisconsin Deaths, 1997
Deaths By Underlying Cause By Age And Sex, 1997	DHFS: Wisconsin Deaths, 1997
Deaths By Underlying Cause By Race And Sex, 1997	DHFS: Wisconsin Deaths, 1997
Leading Cause Of Death: Females By Race, 1996-1997	DHFS: Wisconsin Deaths, 1997
Leading Cause Of Death For Males By Race, 1996 And 1997	DHFS: Wisconsin Deaths, 1997
Leading Causes Of Death For Females, 1996 And 1997	DHFS: Wisconsin Deaths, 1997
Leading Causes Of Death For Males, 1996 And 1997	DHFS: Wisconsin Deaths, 1997
Leading Underlying Cause Of Death By Race, 1996 And 1997	DHFS: Wisconsin Deaths, 1997
Leading Underlying Causes Of Death By Age, 1996 And 1997	DHFS: Wisconsin Deaths, 1997
Most Common Causes Of Death: Wisconsin	Wisc: Chronic Diseases and Their Risk Factors
Summary Of All Causes Of Death, 1997	DHFS: Wisconsin Deaths, 1997
Underlying Cause Of Death By County Of Residence	DHFS: Wisconsin Deaths, 1997
Wisconsin Causes Vs. National Causes Of Death, 1997	National Vital Statistics Repts, Vol. 47, No. 19

**General Demographics**

Actual And Expected Mortality For Chronic Conditions, 1996	DHFS
Actual/Expected Hospital For Chronic Conditions, 1996	DHFS
Percentage of Adults Limited Physical Activity Due To Health, by Age 1992-1996	DHFS
Business Patterns, 1996	Census Bureau
County Population And Changes, 1997 - 1998	Census Bureau
Estimated Population By Age In Selected Years	DHFS
# Hospitalizations For Chronic Cond. By Age, 1996	DHFS
Medicaid-Reimbursed Health Services For Chronic Cond. '96	DHFS
Misc. Demographics	Census Bureau
Mortality Attributed To Selected Chronic Conditions, 1996	DHFS
Percent Of Persons With Select Chronic Conditions, 1992 - 1996	DHFS
Percent Of Persons With Chronic Cond. By Age, 1992 - 96	DHFS
Percent Of Persons With Fair Or Poor Health, 1992 - 1996	DHFS
Physical Limitations Of Older Adults Living In Comm., 1996	DHFS
Population Estimated By Age Group And Sex, 1997	DHFS
State Profile	Fed Bur. Primary Health Care
Wisconsin Family Health Care Survey, 1997	DHFS
Wisconsin Health Facts, 1996	Center For Disease Control: NCHS
Wisconsin Public Health Profiles, 1997 (For Each County)	DHFS

**Projected Population**

By Race, Year, Sex, 1995 - 2009	Center For Disease Control
By Year, Age, 1995 - 2009	Center For Disease Control
By Year, Race, 1995 - 2009	Center For Disease Control
By Year, Sex, 1995 - 2009	Center For Disease Control

**Miscellaneous**

**Reports Available By County/DHFS Region**

Actual And Expected Mortality For Chronic Conditions, 1996	DHFS
Actual/Expected Hospitalizations For Chronic Conditions, 1996	DHFS
Percent Of Adults With Limited Physical Activity Due To Health By Age	DHFS
Number Of Hospitalizations For Chronic Cond. By Age, 1996	DHFS
Medicaid-Reimbursed Health Services For Chronic Cond., 1996	DHFS
Mortality Attributed To Selected Chronic Conditions, 1996	DHFS
Percent Of Persons Reported To Have Chronic Conditions, All Ages	DHFS
Percent Of Persons With Fair Or Poor Health	DHFS
Percent Of Persons Reported To Have Chronic Conditions By Age	DHFS
Population By Age, 1990 And Selected Years	DHFS
Population Estimates	
Public Health Profiles, 1997	
Wisconsin Family Health Survey	

**Reports On Specific Area**

**Milwaukee Metro Area**

Milwaukee Areas Health Status, 1996

**Milwaukee County**

Health And Social Services Plan

Milwaukee County 21st Century Comm.

# APPENDIX C

## FOOTNOTES

1. Alzheimer Association's Southeast Wisconsin Chapter, personal communication, September 23, 1999
2. Facts, Statistics/Prevalence Page. Alzheimer's Association Home Page. March 26, 1999  
[www.alz.org/facts/rstats.htm](http://www.alz.org/facts/rstats.htm)
3. National Vital Statistics Report, Vol. 47, No. 20. Center for Disease Control. June 30, 1999.  
[www.cdc.gov/nchswww/data/nvs47\\_20.pdf](http://www.cdc.gov/nchswww/data/nvs47_20.pdf)
4. New Report on Declining Cancer Incidence and Death Rates; Report Shows Progress in Controlling Cancer. Center for Disease Control. March 12, 1998.  
[www.cdc.gov/nchswww](http://www.cdc.gov/nchswww)
5. Physical Disability File, Information for and about People with Physical Disabilities. Wisconsin Department of Health & Family Services.  
[www.dhfs.state.wi.us/disabilities](http://www.dhfs.state.wi.us/disabilities)
6. Wisconsin Alzheimer's Institute. Wisconsin Department of Health & Family Services.  
[www.dhfs.state.wi.us/aging/age%5fnews/no111/wai.htm](http://www.dhfs.state.wi.us/aging/age%5fnews/no111/wai.htm)
7. Wisconsin Cancer Burden. Center for Disease Control.  
[www.cdc.gov/cancer](http://www.cdc.gov/cancer)
8. Wisconsin Cancer Incidence and Mortality, 1996. Wisconsin Department of Health & Family Services. October, 1998.  
[www.dhfs.state.wi.us/wcrs](http://www.dhfs.state.wi.us/wcrs)
9. Wisconsin Deaths, 1997. Wisconsin Department of Health & Family Services. January, 1999.  
[www.dhfs.state.wi.us/deaths/pdf/97death.pdf](http://www.dhfs.state.wi.us/deaths/pdf/97death.pdf)

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PUBLIC HEALTH FOUNDATION BOARD OF DIRECTORS  
LIST OF POSSIBLE NOMINEES**

**Blue Cross & Blue Shield Special Committee Recommendations**

- Ben Brancel, Secretary of the Wisconsin Department of Agriculture and former Speaker of Wisconsin Assembly
- Howard Fuller, Professor, Marquette University
- David Meissner, President, The Public Policy Forum
- Louise Trubek, Director, Center for Public Representation
- Tom Lyon, Shawano Cattle Breed Improvement and former member, University of Wisconsin Board of Regents

**Medical College of Wisconsin Recommendations**

- Kathy Hudson, President and CEO, W.H. Brady Company
- John Daniels, Quarles & Brady

**University of Wisconsin Medical School Recommendations**

- Robert Froehlke, Former Insurance Executive and Secretary of the Army
- George Steil

