PARTNERING FOR A HEALTHY TOMORROW:
Preventing and Managing Chronic Disease in New Mexico

Background Report

- **April 3, 2009**
  Hotel Encanto
  Las Cruces, NM
- **April 17, 2009**
  Albuquerque Convention Center
  Albuquerque, NM

Convener

New Mexico Department of Health,
On behalf of the Healthy New Mexico Task Force

Facilitator

New Mexico First

Sponsor

AstraZeneca

Authors

- Russell Kieffer, LISW, New Mexico First
- Susan Baum, MD, MPH, New Mexico Department of Health
- Mark Siemon, RN-BC, MPH, MSN,
  University of New Mexico College of Nursing
- James Padilla, MS, New Mexico Department of Health

NEW MEXICO DEPARTMENT OF HEALTH

NEW MEXICO FIRST
People. Ideas. Progress. 20 Years.

AstraZeneca

NEW MEXICO FIRST

People. Ideas. Progress. 20 Years.

Report Produced by
New Mexico First
320 Gold Avenue SW, Suite 300
Albuquerque, New Mexico 87102
Phone: 505-241-4813
Fax: 505-241-4819
Email: info@nmfirst.org
Website: www.nmfirst.org

Table of Contents

Forward

This report provides background information for participants attending the April 2009 forums, *Partnering for A Healthy Tomorrow: Preventing and Managing Chronic Disease in New Mexico*. The report will help frame forum discussions as well as provide context for prevention and management of common chronic diseases such as heart disease, stroke, cancer, diabetes, arthritis and asthma.[a]

Participants at the forum will represent important stakeholders who must collaborate to ensure that the objectives of the Healthy New Mexico Task Force are met effectively and efficiently. Those stakeholders include:

- Community members and leaders
- Public health and healthcare professionals
- Educators, parents and students
- Persons living with chronic diseases
- City and county planning, recreation and transportation professionals
- Employers and human resource administrators of employee benefits plans
- Government officials and policymakers
- Healthcare administrators

Participants are urged to review the report prior to attending the forum.

Purpose of the Forums

These forums are being convened by the New Mexico Department of Health on behalf of the Healthy New Mexico Task Force. The events are funded from appropriations in New Mexico Senate Bill 129, passed during the 2008 legislative session. The measure was sponsored by Senator Dede Feldman and called for the creation of the Healthy New Mexico Task Force. The Task Force has been charged with developing recommendations for reducing overall demand for high-cost medical treatments for chronic diseases in New Mexico. Participants in these statewide forums will contribute important public input that supplements information from government agencies and healthcare systems gathered on behalf of the Healthy New Mexico Task Force. The consensus recommendations generated from the forums will be presented to the interim Legislative Health and Human Services Committee in the summer of 2009.

Forum Convener

The mission of the New Mexico Department of Health is to promote health and sound health policy, prevent disease and disability, improve health services systems, and assure that essential public health functions and safety net services are available to New Mexicans. For this project, the department is charged with managing the Healthy New Mexico Task Force.

Forum Facilitator

New Mexico First events bring together people from all walks of life to identify practical solutions to the state's toughest problems. In the organization's 23-year history, it has engaged over 6,000 people in the democratic process. Co-founded in 1986 by U.S. Senator Jeff Bingaman (D-NM) and retired Senator Pete Domenici (R-NM), the organization conducts three major types of activities: an annual statewide town hall focusing on a critical issue facing the state; specialized forums like this one, for communities and institutions; and smaller consensus facilitations such as strategic planning sessions.

The Forum Process

Like all New Mexico First events, this forum will take participants beyond the typical presentation-filled seminar and will instead draw on their knowledge to find solutions to the issue at hand. This forum will include a few guest speakers, all experts in their field, to set the context. However, the bulk of the work will be done in small groups by the participants themselves. By the end of the forum, each group will have drafted concrete recommendations for their local community, policymakers, and healthcare leaders.

Forum Objectives

- Strengthen awareness of effective approaches to supporting chronic disease prevention and management through physical activity, healthy eating, tobacco control, and access to clinical preventive services.
- Develop concrete recommendations on how New Mexico's communities, schools, businesses, healthcare systems and state/tribal/local governments can take action to better prevent and manage the most common chronic conditions affecting New Mexicans.
- Identify specific actions that can be taken by stakeholders to overcome existing barriers to implementing community, organizational, environmental and policy activities.
- Raise awareness about New Mexico's most prevalent, costly, and, in many cases, preventable chronic health problems.

[a] Although many mental health conditions meet the definition of chronic disease, they are not being included in the scope of these forums because mental health issues are being addressed through the New Mexico Behavioral Health Collaborative http://www.bhc.state.nm.us/

Preparers of this Report

There are few right or wrong answers, and issues related to the prevention and management of chronic disease are increasingly complex. As a result, no brief explanations – including this report – can include all the information and opinions available. The authors and reviewers have provided their knowledge and advice, but ultimately the people and policymakers of New Mexico must decide the path they would like to carve out for themselves, one that is innovative, effective, and unique to improving lives in the state.

Author and Editors

This report was prepared by the following writers and editors:

Authors:

- J. Russell Kieffer, LISW, New Mexico First
- Susan Baum, MD, MPH, New Mexico Department of Health
- Mark Siemon, RN-BC, MPH, MSN, University of New Mexico College of Nursing
- James Padilla, MS, New Mexico Department of Health

Contributing Editor:

Heather Balas, New Mexico First

Reviewed by:

Patty Morris, PhD, New Mexico Department of Health

Chronic Disease in New Mexico

What is Chronic Disease?

Chronic diseases are illnesses that are not contagious, are prolonged in duration, and are rarely cured completely. Examples of chronic diseases include heart disease, cancer, stroke, diabetes, asthma, and arthritis.

Although chronic diseases are more common among older adults, they affect people of all ages and are now recognized as a leading health concern of the nation. Growing evidence indicates that a comprehensive approach to prevention can save tremendous costs and needless suffering.[1]

Nearly 890,000 cases of seven common chronic diseases[b] were reported in New Mexico in 2003.[2] The 2003 direct medical treatment costs for these chronic diseases in New Mexico were estimated at $1.2 billion, and the cost of lost workdays and lower employee productivity was $5.8 billion, leading to a total annual cost estimate of $7 billion.

The leading causes of preventable disease and death are tobacco use, lack of adequate physical activity, and poor nutrition. Lack of physical activity and unhealthy eating are believed to be the biggest contributors to weight gain and obesity. People who are overweight and obese experience increased risk of chronic illnesses and overall poor health. Chronic diseases are responsible for six out of every ten deaths in New Mexico. Appendix A contains a chart comparing New Mexico and national data for a number of important chronic disease risk factors.

The five leading causes of death in New Mexico and nationally are:[3]

- heart disease
- cancer
- accidents (unintentional injury)
- chronic lower respiratory diseases (lung disease)
- strokes

Arthritis, although not a leading cause of death, is the top cause of disability for New Mexico adults.

Appendix B contains a chart comparing New Mexico and national data for rates and deaths for some of the most common chronic diseases.

[b] Cancers, diabetes, heart disease, hypertension, stroke, mental disorders, and pulmonary conditions

Preventing Chronic Disease

Many chronic diseases are at least partly preventable. Policies that support prevention include clean indoor air regulations, menu labeling, advertising restrictions, pricing strategies, and changes to the built environment. Preventing disease requires improving the health status of people at every stage of life. Such a task is not possible one person at a time; rather, it can be achieved only by improving the surrounding social and physical environments.

Many researchers have come to the similar conclusion that environmental and behavioral factors have a more powerful influence on a population than genetics or access to medical care. [4] About 60% of the premature deaths in the U.S. can be attributed to environmental and economic conditions, social circumstances, and behavioral choices that could otherwise be addressed through prevention.[5] Often referred to as *social determinants of health,* these factors include income, education, occupation, family structure, service availability, sanitation, exposure to hazards, social support, racial discrimination, and access to resources linked to health, among others.

With a goal of achieving optimal health for all, the Centers for Disease Control and Prevention (CDC) sets the national standard for health promotion and disease prevention. Its work on the causes of health problems extends beyond the scope of traditional public health practice to include collaboration in education, housing, transportation, labor, and other sectors. The CDC also supports community-based public health efforts that can provide more intensive and sustained interventions than are possible in most health care settings. For this reason, CDC will be cited frequently in this report.

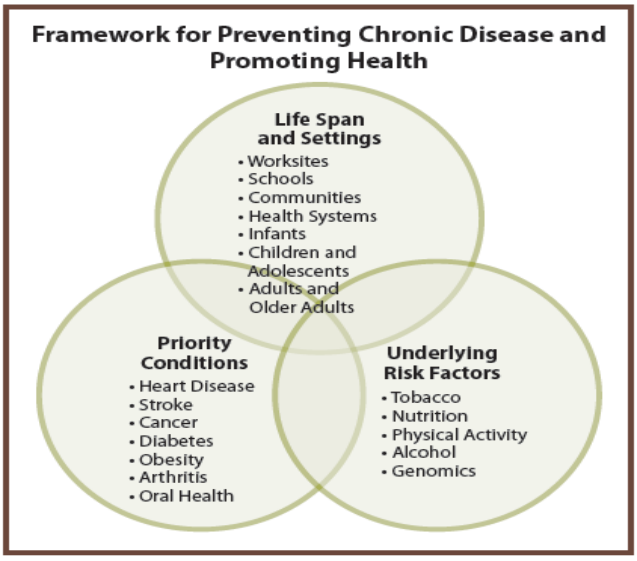

Figure 1: CDC, reprinted with permission

The Socio-ecologic Model

Many factors affect an individual's ability to adopt healthy lifestyles, such as access to recreational areas, affordable healthy foods, clean air, and work and educational opportunities. Some experts believe that wellness and disease prevention programs are most successful if they address all levels of a person's life. The best interventions include a range of activities from the individual level, to the community level, to the public policy level.[6] [See figure 2]

This approach, called the socio-ecologic model, can be used to develop programs that promote healthy lifestyles in a number of different ways. For example:

- Tobacco cessation programs can help people stop smoking. (individual level).
- School programs targeting youth can help prevent teens from using tobacco. (Interpersonal and organizational levels).
- Laws can prohibit smoking in public places or impose tobacco taxes, which make it more difficult to smoke. (community and policy levels).

The adoption and maintenance of healthy lifestyles requires changes not just from individuals, but from families, organizations, communities, and policies in order for long term success. Organizations can include schools, businesses, faith-based groups, and healthcare systems.[7]

Figure 2: Oregon Department of Human Services, reprinted with permission

Using What Works

Adopting Evidence-Based Solutions

Partnership for Prevention (PFP) is a national nonprofit, nonpartisan organization committed to increasing prevention of illness and injury through health policy and public-private partnerships. After analyzing research on public health policies and practices, PFP has identified the following "7 Actions" as the most effective for reducing costs and suffering associated with chronic diseases:

1) Enhance in-school physical education
2) Increase access to places for physical activity
3) Promote healthy foods in schools
4) Increase access to healthy foods in communities
5) Make public places and workplaces smoke-free
6) Increase the price of tobacco products
7) Ensure access to clinical preventive services

PFP's "7 Actions" for chronic disease prevention are consistent with CDC guidelines and with work that has been ongoing in New Mexico's public and private sectors. These actions fall within four main categories:

- physical activity
- healthy foods
- tobacco control
- clinical preventive services

These categories form the foundation of this report, and will be the focus for group discussions during the upcoming. The authors hope that these concrete examples, provided for each of the four categories, will prevent participants from wasting time trying to "reinvent the wheel." Instead we hope to move quickly into *how* to affect desired improvements in public health.

Physical Activity

Challenges

Regular physical activity has been shown to improve overall health and prevent chronic disease. Sedentary, "couch potato" lifestyles in the U.S. are associated with heart disease, diabetes, colon and breast cancer, and osteoporosis. That means the cost of Americans staying in, watching too much television, sitting in front of their computers, or simply not getting enough exercise is between $24 and $76 billion annually year.[8]

In New Mexico, men and boys are more likely to get enough exercise than women and girls, and low-income people (those earning less than $10,000 a year) were significantly less likely get enough physical activity.[9] Hispanics are also less likely to get enough exercise, as are people with lower education levels.

In addition, over a quarter (28%) of New Mexico high school students watch an average of three or more hours of television a day, compared with 35% nationally.[10]

Solutions

The Task Force on Community Preventive Services is an independent, non-governmental, volunteer body of public health and prevention experts. The Task Force found strong for enhancing school-based PE and making changes to environment and policy.[11]

Enhanced School-Based Physical Education

When the curriculum is enhanced to increase the amount of time students spend in moderate or vigorous activity, there is strong evidence that school-based Physical Education (PE) is effective in increasing levels of physical activity and improving physical fitness. This can be done in a variety of ways, including:

- Adding new (or additional) PE classes
- Lengthening existing PE classes, or
- Increasing moderate to vigorous physical activity of students during PE class, without necessarily lengthening class time

Examples of the last approach include changing activities (e.g., substituting soccer for softball) or modifying the rules of the game so that students are more active (e.g., having the entire team run the bases together if the batter makes a hit).

The primary barrier to implementation exists within the school systems. Physical education is mandated in almost every state, but requirements for the amount of PE are generally low (e.g., four semesters, two to three times per week or two semesters of daily PE). Few middle and high schools require daily PE, and schools face increasing pressure to eliminate PE to make more time available for academic subjects. This pressure exists despite the fact that children who are physically active tend to perform better in the classroom, and daily PE does not adversely affect academic performance.[12]

In 2007, about half of New Mexico high school students reported attending PE one or more days per week, and 30% reported attending PE daily. This was similar to national rates.

In New Mexico, accredited primary and secondary schools are required to follow the Physical Education Content Standards with Benchmarks and Performance Standards.[13] This requirement includes a planned, sequential, K-12 PE curriculum, enabling all students to learn and develop skills, knowledge and attitudes necessary to foster a lifetime of healthful physical activity.[14]

The PE curriculum requirements do not require student assessment in physical education, and they do not require school districts to offer physical education classes beyond the 9th grade.[15] Physical education is mandated for Kindergarten through 5th grades, and 7th and 9th grade.[16] The standards do not include a baseline amount of time for moderate to vigorous physical activity, stating only that "students should engage or participate in moderate to vigorous physical activity most days of the week."[17]

Environmental and Policy Approaches

There is also strong evidence that creating new places for physical activity, increasing access to existing places, and distributing educational information helps people achieve healthier lifestyles. Changes might include:[18]

- Building new places (e.g., trails, sidewalks, bike lanes, fitness centers, parks, tennis courts, swimming pools)
- Enhancing access to existing recreation areas by modifying those places or providing people with the means necessary to use these places (e.g., enhancing public transportation to parks, improving lighting, offering employee discounts to fitness centers)
- Raising awareness of existing activities and recreational places

These interventions involve the efforts of worksites, coalitions, agencies, and communities. One potential barrier is that building new facilities takes time and money. In addition, the creation of (or enhanced access to) facilities requires careful planning and coordination. Success is greatly enhanced by community buy-in, which can take a great deal of time and effort to achieve. Inadequate resources and lack of professionally trained staff members may affect how completely and appropriately interventions are implemented and evaluated.

In addition to the above environmental and policy approaches endorsed by the Task Force on Community Preventive Services, two additional interventions have received increasing attention and support over the past several years. They include:

- Transportation policies and infrastructure changes to promote non-motorized transit
- Urban planning approaches— zoning and land use

These types of strategies – particularly bicycle and walking trails so people *can* get around and use their cars less – have been shown to impact the health and exercise rates of both adults and children.[19]

New Mexico Examples

A variety of other public, private, and nonprofit organizations are working to increase physical activity among children and adults in New Mexico. Some also address healthy eating. A few examples include:

CATCH: The NM Department of Health provides funding and technical assistance to 34 schools across the state to implement the Coordinated Approach to Child Health (CATCH) curriculum. CATCH teaches children in grades K-5 to identify, practice, and adopt healthy eating and physical activity behaviors. It also provides training for school staff (PE teachers, classroom teachers, school food service employees, school nurses and others). Research shows that CATCH produces lasting changes in dietary and physical activity behaviors.[20] For example, the city of El Paso, Texas, implemented CATCH in low-income elementary schools, and reduced weight gain among boys and girls in third, fourth, and fifth grades.[21]

Healthy Kids, Las Cruces: The NM Department of Health is piloting a community-wide obesity prevention effort in partnership with the city of Las Cruces, local stakeholders, and eight state government departments. The initiative focuses on creating healthy environments in five community settings: the built environment (buildings, sidewalks, and streets), the educational system, food system, healthcare system, and families and community. See Appendix C for more details and their five-year plan. A similar initiative will soon be launched in Roswell.

ACHIEVE: The New Mexico Action Communities for Health Innovation and Environmental Change (ACHIEVE) initiative, a partnership among the state Department of Health, YMCA of Central New Mexico, St. Joseph's Community Health, and other community organizations, is using community development processes to create a healthier community in the Southeast Heights of Albuquerque. ACHIEVE partners conducted an assessment of local policies and environmental issues in area worksites, schools, community-based organizations, healthcare facilities and the community as a whole. The ACHIEVE action plan includes improving walking paths in two alleyways, improving the aesthetics of the alleyways with art, creating a community garden, and creating two walking groups.

EnhanceFitness: The New Mexico Arthritis Program is implementing EnhanceFitness, an evidence-based physical activity program for people with arthritis. Jewish Family Service of New Mexico and New Mexico Senior Olympics are the lead agencies.

Bike Coalition of New Mexico: This nonprofit organization is dedicated to improving bicycling in New Mexico and encouraging more people to ride bikes for transportation and recreation. They work on bicycle legislation, road construction, and safety education programs for bicyclists.[22]

Albuquerque Prescription Trails Pilot Program (Rx Trails): This pilot program is developing and marketing a "prescription" to increase walking and wheelchair rolling on suggested routes in Albuquerque. A Spanish and English version of a Prescription Pad and a zip-code organized Walking Trail Guide for the City and South Valley of Bernalillo County have been developed. This is a unique collaboration of two coalitions: the Albuquerque Alliance for Active Living and New Mexico Health Care Takes On Diabetes. Partners include the City of Albuquerque's Planning and Parks and Recreation departments, healthcare providers, the New Mexico Department of Health, the Clinical Prevention Initiative, and the National Park Service. A similar initiative is in the planning process in Santa Fe.

NM Safe Routes to School: Developed by the New Mexico Department of Transportation, this program works with communities around the state to plan and implement routes to school that increase physical activity. By providing safe walking and bicycling routes, children and parents are encouraged to walk or bike to school.

National Dance Institute of New Mexico: Through individual school partnerships, NDI-NM brings award-winning arts and physical education programs to underserved children in urban, rural and Native American communities throughout the state.

Healthy Foods

Challenges

Nutrition can have a significant impact on chronic diseases (cancer, cardiovascular disease, diabetes, and obesity). Increasing consumption of fruits and vegetables, whole grains, and calcium-rich foods, while reducing saturated fats, trans-fats, sodium, added sugars, and excess calories could dramatically improve New Mexicans' health and well-being.

Society and Culture

There have been dramatic changes in the food environment and the way that Americans eat over the past 30 years. Due to time constraints and increasing food costs, Americans are more likely to choose processed, pre-packaged foods. Between 1970 and 2000 the quantity of added fats and oils in the American food supply increased 30%, and caloric sweeteners increased the same amount. As a result, Americans now consume almost half of their daily calories from added sugars and fats.

Americans are eating out more often and consuming more calories from away-from-home establishments than ever before. Today nearly half of all food expenditures are spent eating out, up from 34% in 1974 and nearly double what it was in 1955. Away-from-home foods tend to be more calorie dense and of poorer nutritional quality than foods prepared at home.[23]

Dietary preferences start at a young age and are closely linked to family and culture. In addition, the "macro food environment" (society, food costs, public policies, etc.) has a strong influence on what families are able to eat. In general, population groups that suffer the worst health status, including nutritional health and obesity, are also those that have the highest poverty rates.[24] Several studies have shown lower availability and affordability of healthy foods in low-income neighborhoods.[25] Lack of access to affordable and healthy foods may be contributing to disparities in diet-related chronic diseases and obesity rates.

Food at School

The school food environment can have a large impact on children's and adolescents' dietary intake because up to two meals and snacks are eaten at school every day.[26] Food at school is typically available through federally reimbursed school meals and "competitive foods" from vending machines, a la carte offerings in the cafeteria, snack bars, school stores, and fundraisers. Meals served in the National School Lunch Program and School Breakfast Program must meet federally defined nutrition standards and the Dietary Guidelines for Americans. However, federal requirements currently do little to limit the sale of competitive foods or to set school-wide nutrition standards.

Solutions

Healthy Foods in Low-Income and Rural Areas

Supermarkets offer the greatest variety of food at the lowest cost. Low-income and minority neighborhoods have fewer chain supermarkets than do middle- and upper-income neighborhoods. Among the important opportunities to reduce disparities are initiatives that encourage the development of grocery retail investments in low-income communities. Successful initiatives have been characterized by political leadership at the highest levels and effective partnerships with community-based nonprofit organizations.

Lack of access to supermarkets is also a problem in some rural areas. In rural states like New Mexico, it will take community action and public policy improvements to strengthen the capacity of rural grocery stores to provide nutritious quality and affordable foods.

Other potential strategies to get healthy, local foods into low-income neighborhoods include:

- Fostering neighborhood farmers markets, cooperative food stores, and community gardens
- Incorporating fresh produce and healthy foods into corner stores and convenience stores
- Having neighborhood churches and community centers purchase produce from local farmers – to be sold to community members following church or community events
- Having local community clinics and public health departments provide local produce to patients during clinic visits as part of a health promotion initiative
- Explore ways to have food banks and food shelves obtain fresh produce and healthy foods.

Federal Agriculture Policy

Much of what New Mexicans eat is related to federal agriculture policy. The 2008 Farm Act expands programs that help fruit and vegetable farmers market and sell their products to consumers. It also expands the Senior Farmers' Market Nutrition Program and increases funding to the Fresh Fruit and Vegetable Program. This program assists elementary schools with fresh fruit and vegetables for snacks and reduces barriers to farm-to-school programs. Finally, the act funds a pilot program to study how the federal Supplemental Nutrition Assistance Program (SNAP), formerly "Food Stamps," can improve the diet and health status of participants through incentives to purchase healthful foods.[27]

Restricting Unhealthy Foods at Schools

In New Mexico, legislation restricts the types of a la carte, vending machine, and other competitive foods that can be sold in public schools during school hours. It does not restrict the types of foods or beverages that can be sold during after-school events or fundraisers. New Mexico does not require school districts or schools to have food service directors.[28] The state does, however, have a fully staffed Student Nutrition Bureau that provides resources and technical assistance support to school food service programs statewide. New Mexico was recently nationally recognized as having the best delivery of student breakfast programs.

New Mexico school districts are required to develop and implement local wellness policies that address student and school employee wellness through a coordinated school health approach. The school wellness policies must include nutrition guidelines for a la carte offerings and fundraisers, ensuring that at least half the offerings are healthy.[29] Schools are also required to provide health education, including information on healthy nutrition.[30]

Menu Labeling

In 2006, the Keystone Center, a nonprofit policy organization, released a report requested by FDA to develop recommendations on away-from-home foods.[31] Among the recommendations were that food establishments should provide consumers with caloric information in a standard, easily accessible format and should increase the availability of low-calorie menu items. They also recommended that research should be conducted on how consumers use nutrition information for away-from-home foods, how this information affects caloric intake, and how nutrition information affects restaurant operators. Legislation has been introduced in Congress and in more than a dozen state legislatures that would require chain restaurants and fast-food outlets to list calories and other nutrition information on their menus to make it easier for consumers to make more healthful food choices.[32]

New Mexico Examples

Kitchen Creations: The four lessons taught in Kitchen Creations were developed to help families manage diabetes through meal planning and healthy food preparation. The program provides hands-on opportunities to learn cooking techniques that use new or more healthful ingredients. The cooking classes are taught in a team approach by an NMSU County Extension staff person and a local health professional who has a background in diabetes management.

WIC FIT KIDS: The DOH Women, Infant, and Children's Supplemental Nutrition Assistance Program (WIC) has trained all of its staff to hold facilitated discussions with parents around healthy eating and physical activity for children ages five and under. WIC FIT KIDS has demonstrated an increase in knowledge and improvement in related health behaviors among participants.

The New Mexico Farmers' Market Association (NMFMA) works to support Farmers' Markets in 50 New Mexico communities that bring locally grown produce directly to consumers. Most of the Farmers' Markets are open seasonally, but Farmers' Markets in Santa Fe, Los Alamos, Corrales, Las Cruces, and Los Ranchos are open all year, providing residents with healthy foods from approved New Mexico farmers. The New Mexico Farmers' Market Nutrition Program (FMNP) provides WIC participants and seniors with vouchers to purchase fruits and vegetables at Farmers' Markets.[33]

Cooking with Kids: This nonprofit organization in Santa Fe works with local elementary schools to encourage students to explore many varieties of foods. The program models healthy food choices in classrooms and cafeterias. Its Spanish/English bilingual curriculum provides learning opportunities in math, science, social studies, language arts, music, and art.

Roadrunner Food Bank Mobile Food Pantry: This is a new program of Roadrunner Food Bank that was started in June 2008. It delivers fresh produce and staple foods to areas where individuals may not have access to food support programs, or where food pantries or feeding programs do not exist. The Mobile Food Pantry is available to communities in nine New Mexico counties through partnerships with local community organizations who sponsor the initiative in their underserved areas.

Other stated-wide initiatives include community and school edible gardens, Media Literacy, New Mexico Fresh Fruits and Vegetables, and comprehensive school district wellness policies.

Tobacco Control

Challenges

Smoking is the leading cause of preventable deaths in the U.S., and it costs the nation almost $200 billion dollars in healthcare costs and lost productivity annually. About half of all lifetime smokers die early because of their decision to smoke. In New Mexico, one in five adults smoke, as do a quarter of youth. About 2,100 New Mexicans die from tobacco use annually, and 42,000 are living with tobacco-related diseases. Annual state smoking-related costs are $928 million.[34]

Overall, New Mexico smoking rates have declined slightly in recent years, though we remain slightly higher than the national average for both youth and adults. The state's highest prevalence of adult smokers is found in Lea, San Miguel, San Juan, Valencia, and Otero counties.[35] The highest rates of youth smoking are found in Union, Mora, Roosevelt, Cibola, and Eddy counties.[36]

While smoking rates are going down, the use of chew, snuff, and dip tobacco is increasing both nationally and in New Mexico. The prevalence of adult chew tobacco users in the U.S. rose consistently between 1993 and 2006, from 2.6% to 3.6% nationally; however, New Mexico rose to 4.6% in 2006.[37] The use of chew, snuff, and dip among NM high school youth is even higher at 12%.[38] These products can cause oral cancer and other non-cancer oral diseases; they can also lead to nicotine addiction and dependence.[39]

In the U.S., exposure to secondhand smoke kills more than 3,000 adult nonsmokers from lung cancer, 46,000 from coronary heart disease, and about 430 newborns from sudden infant death syndrome.[40] In New Mexico, about 92% of residents are protected by a strong statewide clean indoor air law, which prohibits smoking in most indoor public places. However, 8% of NM residents reside or work on tribal lands that do not have protections from secondhand smoke.[41] Also, many people continue to be exposed to secondhand smoke in homes and cars.

Some population groups are disproportionately affected by tobacco, including higher tobacco-use rates, greater exposure to secondhand smoke, targeting by the tobacco industry, and as a result may experience more negative health outcomes than other groups. Some of these groups include: people with less education or income, the uninsured, 18-24 year olds, lesbian, gay, and bisexual people, people with disabilities, and American Indian youths.[42]

Solutions

Overwhelmingly, research shows that three key interventions will decrease rates of tobacco use and resulting health and economic costs: [43]

- Increasing taxes on tobacco products
- Implementing comprehensive smoke-free laws
- Allocating adequate and sustained funding for proven tobacco control programs

The national Institute of Medicine (IOM) recommends that states with cigarette taxes below $1.25 per pack raise them. [44] The current tax in New Mexico is $0.91 per pack, lower than the rates in neighboring Arizona or Texas, but higher than Colorado and Utah. The federal cigarette tax will soon increase by $0.62 a pack, totaling about $1. That federal tax is projected to produce $44.5 billion in long-term savings by reducing tobacco-caused healthcare costs.[45] New Mexico increased its tax on cigarettes in 2003, from $0.21 to $0.91 a pack, which decreased per capita cigarette sales by one-third.[46]

In 2007, New Mexico passed the Dee Johnson Clean Indoor Air Act, prohibiting smoking in indoor public places—including restaurants, bars, and workplaces—except on tribal lands. About 74% of New Mexicans supported a comprehensive statewide smoke-free law prior to its passage,[47] and a year after the Clean Indoor Air Act took effect 85% were in favor of it. Also, 83% of New Mexicans have smoke-free homes, and 74% prohibit smoking in their vehicles.[48]

The state, through the Tobacco Use Prevention and Control Program, contracts with communities, schools, and organizations to implement activities and services that decrease the harmful and addictive use of commercial tobacco, (outside of sacred or ceremonial purposes).[49] In fiscal year 2009, New Mexico provided $9 million for tobacco control programming, which is 38% of the recommended $24 million.[50] Some examples of the work funded include media efforts, cessation services, and a telephone quitline to help smokers quit. Tobacco users in New Mexico have access to free tobacco cessation services through 1-800-QUIT NOW, which includes phone sessions with trained coaches, a personal quit plan, self-help materials, referrals, nicotine patches or gum (as medically appropriate), and services are available in Spanish.[51]

Private Sector

It is also important to consider the role that the private sector can play in preventing tobacco use, supporting cessation efforts, and eliminating exposure to secondhand smoke. A public/private partnership can work to implement and maintain tobacco programs and, in fact, is important when resources are scarce. The State Tobacco Use Prevention and Control Program and its 1-800-QUIT NOW quitline contractor have worked closely with private health plans in the state as part of a Quitline Advisory Committee since 2005. During this time, four health plans have developed their own tobacco quitlines for their plan members, based on the state model. Now, there is the ability to transfer callers to 1-800-QUIT NOW to their health plan's specific quitline services, while freeing up state quitline resources for uninsured or underinsured New Mexicans. The state and private health plans have developed joint tobacco educational materials to healthcare providers, patients, and public health clinic sites. Other areas of public/private partnership include the planning and implementation of smoke-free worksite campuses and secondhand smoke education as well as technical assistance for owners and managers of apartments and condominiums.

Clinical Preventive Services

Note to Forum Participants: This section is optional reading and includes some clinical or physician-based strategies.

Clinical preventive services (CPS) delivered in healthcare settings are an important component in chronic disease prevention and management. There are three types of CPS: primary, secondary, and tertiary. *Primary preventive services* help keep people from getting sick; examples include immunizations, safe drinking water, or blood pressure control.

The goal of *secondary preventive* services is to identify and detect disease in its earliest stages, before noticeable symptoms develop, when it is most likely to be treated successfully. With early detection and diagnosis, it may be possible to cure a disease, slow its progression, prevent or minimize complications, and limit disability. An example of secondary prevention is using mammography to screen women for early detection of breast cancer.

Tertiary prevention, by contrast, focuses on people who already have illnesses. The goal here is to keep those illnesses from worsening or related ones from setting in. For example, people with diabetes need regular eye exams to prevent vision loss.

Recommendations for Clinical Preventive Services

The U.S. Preventive Services Task Force (USPSTF) is the leading independent panel of private-sector experts in prevention and primary care.[52]

The USPSTF conducts rigorous, impartial assessments to ensure the effectiveness of a broad range of primary and secondary clinical preventive services, including screening, counseling, and preventive medications. This Task Force's recommendations are routinely used to provide quality and appropriate preventive care.

For example, the USPSTF strongly recommends that clinicians screen all adults for tobacco use and provide cessation interventions for those who smoke or chew. Other recommendations include:

- screening for breast, cervical, and colorectal cancers
- high blood pressure
- lipid disorders (cholesterol and triglycerides)

For adults with high blood pressure, lipid disorders or other risk factors for cardiovascular disease, screening for diabetes, counseling for healthy diet, and discussing daily aspirin use are recommended.

For some clinical preventive services, the USPSTF considers the evidence insufficient to recommend for or against their routine use, and, importantly, they also issue recommendations *against* certain clinical preventive services.

Most tertiary clinical preventive services recommendations come from professional organizations and specialty medical societies. For example, the American Diabetes Association publishes annual "standards of medical care in diabetes" which include tertiary preventive services to minimize diabetes complications. These services provide screening for early detection of eye, foot and kidney problems, when effective interventions can greatly reduce blindness, amputations and kidney failure. Tertiary prevention for diabetes also includes aggressive control of risk factors for cardiovascular disease (such as high blood pressure, smoking, and lipid disorders) since persons with diabetes are two to four times more likely to die from heart disease or stroke as persons without diabetes.

Appendix D contains a chart comparing New Mexico and national data for delivery of a number of clinical preventive services related to chronic diseases.

Healthcare Workforce[c]

Having an adequate healthcare workforce is crucial for delivery of all clinical services, including CPS. All of New Mexico's counties except Los Alamos have some type of federal Health Professional Shortage Area designation.[53] This designation means that throughout the state, there are shortages of all levels and specialties of healthcare providers.

There are a number of state administered programs focused on enhancing New Mexico's Health Professional Workforce. These include loan repayment and loan-for-service programs for healthcare professionals and students who commit to practicing in a designated shortage area. Additional programs assist communities in the recruitment, placement, and retention of healthcare personnel in underserved areas of the state.[54]

Health Insurance – Solution *and* Barrier

Including coverage for CPS in health insurance policies may increase access among insured individuals. Even though employers understand the need to prevent illness and disability, they do not always cover important preventive benefits, and they may not follow evidence-based recommendations. [55]

In 2005, representatives from the CDC partnered with the National Business Group on Health and the Agency for Healthcare Research and Quality to develop *A Purchaser's Guide to Clinical Preventive Services: Moving Science into Coverage.* The guide validates the need for employers to include comprehensive CPS in their medical benefit plans.

[c] See Appendix E to review the New Mexico First Executive Summary from the healthcare workforce forum, *Looking to the Future: Preparing for the Next Generation in Health Careers* held in 2008.

Legislative mandates for coverage of specific CPS have also occurred. In New Mexico, legislation has been passed during the past several years requiring most major health insurance policies to provide coverage for tobacco cessation interventions and screening for colorectal cancer. A federal requirement has been in place for a number of years requiring coverage for mammography.

However, 23% of New Mexicans (441,351 persons) did not have health insurance coverage during 2006-2007, compared to 15% of all Americans.[56] It is anticipated that this number will only increase. A 2009 report from the Institute of Medicine (IOM) notes that rising healthcare costs and a severely weakened economy threaten not only employer-sponsored insurance, the cornerstone of private health coverage in the United States, but also threaten recent expansions in public coverage.[57] The report demonstrated the following:

- Adults without health insurance are much less likely to receive clinical preventive services that can reduce unnecessary illness and early death.
- Adults without health insurance are more likely to be diagnosed with later-stage cancers that are detectable by early screening.
- Adults with chronic conditions who lack health insurance are more likely to suffer poorer health outcomes, greater limitations in quality of life, and premature death.
- When adults acquire health insurance, many of the negative health effects of not having insurance diminish.

The committee that developed the IOM report recommends that the President work with Congress and other public and private sector leaders to achieve health insurance coverage for everyone. A number of strategies to produce universal or near universal coverage within New Mexico have been studied and proposed in recent years and are receiving a great deal of public and political attention.

For the many low-income New Mexicans who lack health insurance coverage, limited access to specific CPS may be available through state administered programs. The New Mexico Breast & Cervical Cancer Early Detection Program administered by DOH pays for screening and diagnostic services provided by a network of contracted clinicians. Uninsured or underinsured women ages 30 and older who meet household income requirements are eligible.[58] However, current federal and state funding levels can provide services for only approximately 18% of eligible New Mexico women every year. Women who are diagnosed with a cancerous or pre-cancerous condition through the program may be eligible for full Medicaid coverage while they are receiving treatment. A similar program to pay for screening and diagnostic services for colorectal cancer has been piloted in several states by CDC, but a mechanism for paying for subsequent treatment has not yet been established.

Healthcare Delivery Systems

A number of researchers and organizations endorse the idea of changing healthcare delivery systems to better support the provision of CPS. This includes incorporating changes that increase the percentage of adult patients who are up-to-date with high priority CPS.

The Institute for Clinical Systems Improvement recently identified a number of changes that healthcare systems can make, including:

- Generating electronic reminders for preventive services using electronic medical records or creating a “tickler” reminder system using paper medical records.
- Developing a "catch-up" plan for those patients who are not on time with services.
- Creating a tracking system that allows for periodic medical record audits to identify patient gaps in preventive services.
- Developing an educational plan for staff and providers around preventive services and organizational goals.[59]

The use of economic incentives to influence the specific prevention practices of healthcare providers and consumers was the subject of a 2004 IOM report. However, the summary for the report notes that while financial incentives can influence behavior in the short term, they may not sustain long-term change. So questions remain about whether investing in office system revisions which affect long-term changes in practice is a better choice than relying on incentives. A call for future research in a number of disciplines was proposed to better answer such questions.[60]

Professional Education

Keeping up-to-date with best clinical practices and incorporating changes into their clinics can be daunting for busy healthcare providers. In New Mexico, there are a number of organizations that provide professional education and resources for delivering clinical preventive services.

The Clinical Prevention Initiative (CPI) was created by the Department of Health, the New Mexico Medical Society, and many partnering organizations to maximize the reach of high priority clinical preventive services in our state.[61] The CPI provides resources on a number of chronic disease-related CPS including tobacco cessation, mammography, colorectal cancer screening, problem drinking, and promoting healthier weight to adults.

Envision New Mexico is an organization addressing pediatric issues, including prevention, identification and treatment of childhood overweight.[62]

New Mexico Health Care Takes on Diabetes strives to improve diabetes care in our state, including provision of appropriate tertiary CPS to people with diabetes.[63]

Project ECHO (Enhancing Community Health Outcomes) at the University of New Mexico conducts a cardiovascular disease risk management project using telehealth technology to educate rural healthcare providers and co-manage complex patients.

Conclusion

In New Mexico First forums, the goal is to bring together a wide spectrum of people with different opinions and points of view to find consensus. We choose to unify New Mexicans by finding and focusing on the common ground.

During the forum, *Partnering for A Healthy Tomorrow: Preventing and Managing Chronic Disease in New Mexico,* you will take part in a day's worth of discussions. By the end of the process, the entire group will have come to consensus on a smart list of recommendations for communities and policymakers. These recommendations should point to strategies the participants feel can make the biggest impacts.

Once the town hall is complete, recommendations will be reported to the Interim Legislative Health and Human Services Committee in the summer of 2009.

Appendices

Appendix A

How common are some of the risk and protective factors for chronic diseases in New Mexico?
How does New Mexico compare to the rest of the US?

Indicator	New Mexico	U.S.
Adults ages 18 or older who report eating fruits and vegetable 5 or more times/day	22.4%	24.4%
High school students (grades 9-12) who report eating fruits and vegetable 5 or more times/day	17.9%	21.4%
Obesity among adults ages 18 or older	25.1%	26.3%
Obesity among high school students (grades 9-12)	10.9%	13.0%
Recommended physical activity among adults ages 18 or older	53.3%	49.5%
Recommended physical activity among high school students (grades 9-12)	43.6%	34.7%
Cigarette smoking among adults ages 18 and older	20.8%	19.8%
Cigarette smoking among high school students (grades 9-12)	24.2%	20.0%
Source: CDC Chronic Disease Indicators http://apps.nccd.cdc.gov/cdi/Default.aspx accessed 3/09. Based on 2007 data.		
Confidence Interval (CI) available at http://apps.nccd.cdc.gov/cdi/Default.aspx		

Appendix B

What is the burden of the most common chronic diseases in New Mexico? How does NM compare to the rest of the US?

Indicator	New Mexico	U.S.
New cases of invasive cancer* (all cancers combined) (2004)	409.0	458.2
Cancer deaths (all cancers combined) (2004)	161.5	185.7
Major cardiovascular diseases deaths** (2004)	237.5	286.6
Adults ever diagnosed with diabetes (2007)	7.8%	8.0%
Diabetes deaths (2001)	70.3	77.1
New cases of treated end-stage renal disease attributed to diabetes (2006)	226.5	160.8
Arthritis among adults ages 18 and older (2007)	27.2%	27.5%
Asthma deaths (2004)	1.5	1.3
Deaths with chronic obstructive pulmonary disease*** among adults age 45 and older (2001)	84.7	88.5
**Invasive Cancer - cancer that has spread beyond the layer of tissue in which it developed and is growing into surrounding, healthy tissues.*		
***Cardiovascular disease –a variety of heart diseases and events that impact the heart and circulatory system, including high blood pressure and coronary artery disease.*		
****Chronic Obstructive Pulmonary Disease - (COPD) is comprised primarily of two related diseases - chronic bronchitis and emphysema. In both diseases, there is chronic obstruction of the flow of air through the airways and out of the lungs, and the obstruction generally is permanent and progressive over time.*		
Source: CDC Chronic Disease Indicators http://apps.nccd.cdc.gov/cdi/Default.aspx accessed 3/09.		
Confidence Interval (CI) available at http://apps.nccd.cdc.gov/cdi/Default.aspx		

Appendix C

HEALTHY KIDS
Building a Fit Future - One City at a Time LAS CRUCES

The Department of Health (DOH) is piloting a community-wide obesity prevention effort in partnership with the City of Las Cruces, local stakeholders, and eight state government departments. *Healthy Kids, Las Cruces* connects and builds on a cross-section of community efforts to motivate children and youth to eat healthier and be more physically active. Lack of physical activity and poor nutritional habits are major contributors to overweight, obesity and Type II diabetes.

Healthy Kids, Las Cruces focuses on creating healthy environments in five community settings: the built environment, the educational system, food system, healthcare system, and families and community. The 5 year vision for each setting is listed below:

1. BUILT ENVIRONMENT

Five Year Vision: Create a safe, accessible, and adequate Las Cruces infrastructure that expands opportunities to increase physical activity and promote healthy eating in the built-environment for children, youth, and families.

2. EDUCATIONAL SYSTEM

Five Year Vision: Create an environment where LCPS students have the opportunity to participate in daily physical activities, make informed and healthy choices in selecting food items from school vending machines and in the cafeteria line, and are exposed to fresh fruits and vegetables in schools.

3. THE FOOD SYSTEM

Five Year Vision: Create a Las Cruces community where healthy foods are more available, accessible, affordable, marketed, and demanded by consumers, especially low-income consumers. Healthy foods are defined as nutrient-dense, locally produced, minimally processed, humanely raised, and/or seasonal.

4. THE HEALTHCARE SYSTEM

Five Year Vision: To create a system in which the children, youth and families of Las Cruces understand, have access to, and utilize health maintenance and wellness education services as they relate to obesity prevention.

5. FAMILIES AND COMMUNITY

Five Year Vision: Create public awareness on ways to eat healthfully and be active and increase opportunities and support for regular community activities that motivate children, youth and families to be physically active and make healthy food choices.

HEALTHY KIDS, LAS CRUCES: FIRST YEAR KEY ACCOMPLISHMENTS

The 5-2-1-0 Mayor's Challenge: It calls on elementary students to take the challenge and eat 5 or more fruits and vegetables a day, engage in 2 hours or less of TV and other screen time a day, increase their physical activity to at least 1 hour a day, and eliminate soda from their diet.

Conlee Elementary School: As the initiative's flagship school, at least one dozen new nutrition and physical activity programs are being implemented at Conlee Elementary for School Year 2008-09. New programs include the nationally recognized nutrition program *Cooking with Kids*, physical education classes 3 times a week, the creation of an edible garden, a Safe Routes to School program, and family food, fitness and fun fiestas. A program evaluation will be conducted to measure changes in students' eating and fitness behaviors.

Healthy Eating Active Lifestyle (HEAL): By mid-September 2008 the Las Cruces public health regional office will begin accepting referrals from local health care providers for children and youth identified as at-risk for or obese to participate in its newly established weight management program – HEAL.

Income Support Division (ISD) Cooking Classes: Healthy home cooking classes are conducted in waiting rooms of the two ISD offices in Las Cruces. People applying for food stamps, TANF or Social Security visit ISD offices.

Safe Routes to School Awards: Three Las Cruces elementary schools were awarded state funding for a Safe Routes to School program.

Healthy Kids New Mexico Webpage: By mid-September 2008 parents, teachers and community organizations will have access to a new website designed to encourage elementary school-age children to make healthy food choices and be more physically active. The site provides fun-filled activities, lesson plans, nutrition information and healthy recipes and can be accessed at: HealthyKidsNM.org

NEXT STEPS

- Replicate *Healthy Kids, Las Cruces* across the state;
- Build a strong statewide children's obesity monitoring and program evaluation system;
- Build greater alignment and collaborative obesity prevention efforts and messages across New Mexico's more than 40 state health, nutrition, agriculture, education, and physical activity programs; and
- Address gaps that exist in the continuum and quality of nutrition and physical activity services, especially for those who are low-income and minorities.

Appendix D

Are New Mexicans receiving CPS for chronic disease prevention and management?

Status	Indicator	Measure	New Mexico	U.S.
Up-to-date breast cancer screening	Mammography use among women aged >= 40 years - 2006	Prevalence* (CI)**	70.0% (67.9-72.1)	76.5%
Up-to-date cervical cancer screening	Pap smear use among adult women aged >= 18 years - 2006	Prevalence (CI)	83.1% (81.0-84.9)	84.0%
Up-to-date colorectal cancer screening	Fecal occult blood test or sigmoidoscopy/colonoscopy among adults aged >= 50 years - 2006	Prevalence (CI)	48.5% (46.4-50.5)	55.0%
Up-to-date cholesterol screening	Cholesterol screening among adults aged >= 18 years - 2007	Prevalence (CI)	69.5% (67.7-71.3)	74.8%
Up-to-date diabetes eye exam	Dilated eye examination among adults aged >= 18 years with diabetes - 2007	Age-adjusted Prevalence*** (CI)	66.5% (62.4-70.6)	66.3% (64.1-68.5)
Up-to-date diabetes foot exam	Foot examination among adults aged >= 18 years with diabetes - 2007	Age-adjusted Prevalence (CI)	73.6% (69.5-77.7)	69.4% (67.2-71.6)
*Prevalence: The measured or estimated percentage of people -- weighted to population characteristics -- who actually had that attribute or disease during a specific year.				
**CI: 95% Confidence Interval.				
***Age-adjusted Prevalence: Prevalence (see above), standardized to the age of distribution of a specific population, usually the standard U.S. 2000 population.				
Source: CDC Chronic Disease Indicators (http://apps.nccd.cdc.gov/cdi/Default.aspx) accessed 2/09.				

Appendix E

Executive Summary from Looking to the Future: Preparing for the Next Generation in Health Careers

New Mexicans in urban, rural, and tribal communities want healthcare services that are accessible and that provide alternatives. They want comprehensive care that is "culturally competent." New Mexicans want healthcare providers and professionals that represent the diversity of the community and that are competent in addressing the needs of a culturally diverse population. They realize that to improve the health of their communities, people who are interested in health careers and professions need to have access to educational opportunities at all levels that are seamless and are aligned with workforce needs. They also realize that reliable population health data, adequate financial support, and policymaker commitment is required. New Mexicans want rational healthcare policies that maximize our healthcare dollars in an efficient and equitable way and healthcare services that assure preventive and primary care access, delivery, and career development, especially in our underserved communities.

These recommendations and others resulted from the health careers pipeline forum: *Looking to the Future: Preparing for the Next Generation of Health Careers.* This event was convened by the University of New Mexico Health Sciences Center Office of Diversity and the University of New Mexico Hospitals on May 2-3, 2008 in Albuquerque, NM. It brought together 160 people from all parts of the state. Participants included students, educators, and administrators from the secondary and higher education school systems, healthcare employers and practitioners, members of rural and tribal communities, and federal and state policymakers.

The forum was facilitated by New Mexico First, a nonpartisan, nonprofit organization co-founded in 1986 by U.S. Senators Pete Domenici (R-NM) and Jeff Bingaman (D-NM). New Mexico First events bring together people from all walks of life to identify practical solutions to the state's toughest problems. In New Mexico First's 22-year history, it has engaged over 8,000 people in the democratic process. The organization conducts an annual statewide town hall focusing on a critical issue facing the state and also facilitates specialized forums for communities and institutions that need consensus feedback. This event was a specialized forum conducted through a contract with UNM.

The recommendations for strengthening the health careers pathways are summarized below, with additional details provided in the full report.

Education and Workforce Policy

1. Simplify the credentialing system for all licensed health professionals and develop a system to utilize retired and inactive licensed health professionals.
2. Establish a healthcare career pathway structure.
3. Transform the healthcare philosophy and culture to patient and caregiver-centered care.

Community-based Care and Training

4. Develop and support an integrated, interdisciplinary system of care that is appropriate to the community.
5. Fund recruitment, retention, and professional development for math and science teachers and develop multiple sites of community-based health professions training.

Education and Workforce Resources

6. Increase resources for core academic programs and career awareness programs in all public schools.
7. Provide appropriate and adequate resources to expand health professions education infrastructure and faculty.
8. Develop and implement a marketing plan for the entire education system (pre-school through college) to promote health professions career awareness and career preparation and to support urban, rural, and tribal communities in recruiting and retaining healthcare providers.
9. Increase funding and reimbursement for evidence-based intervention and prevention programs.

Collaboration

10. Commit time and resources to collaborate and educate students about the relevancy of core curriculum to healthcare professions.
11. Engage in meaningful collaboration that results in timely implementation of proposed initiatives.
12. Improve recruitment and retention efforts through sustainable collaboration.
13. Create an alliance of stakeholders.

Incentives

14. Promote educational, financial, and other support systems as incentives to recruit and retain healthcare educators and providers in the community.
15. Distribute resources that are incentives to employers and healthcare professionals for increased recruitment, training, and retention and for positive health outcomes.

Technology

16. Produce a website portal focused on all healthcare careers that provides resource information and links to local healthcare professionals.
17. Disseminate information regarding best practices, educational funding, job vacancies, community and family resources, and mentor/speaker resources.
18. Optimize the use of technology to include a strategic marketing plan, web portal, and data tracking system.
19. Integrate and utilize telehealth.

These recommendations will be prioritized by an implementation team composed of forum participants. This group will spend the next 6-12 months advancing the recommendations with policymakers, community leaders, educators, and the public.

Endnotes

[1] (Centers for Disease Control and Prevention, 2009)
[2] (The Milken Institute, 2007)
[3] (New Mexico Department of Health, 2008) data reflects 2005 and 2006.
[4] (Prevention Institute, February 2008)
[5] (Prevention Institute, February 2008)
[6] (New Mexico Department of Health, 2006)
[7] (New Mexico Department of Health, 2006)
[8] (Roux, 2008)
[9] (New Mexico Department of Health, 2008a)
[10] (Action for Healthy Kids, 2008)
[11] (Task Force on Community Preventive Services, 2002)
[12] (Task Force on Community Preventive Services, 2002)
[13] Code 6.20.6. (New Mexico Administrative Code [NMAC] 2006)
[14] Code 6.30.2.20 (New Mexico Administrative Code [NMAC] 2006)
[15] Code 6.30.2.20 (New Mexico Administrative Code [NMAC] 2006) pg6.
[16] (Action for Healthy Kids, 2008)
[17] (New Mexico Administrative Code [NMAC] 2006)
[18] (Partnership for Prevention, 2008b)
[19] (Partnership for Prevention, 2008a)
[20] (New Mexico Department of Health, 2007)
[21] (Coleman, 2005)
[22] (League of American Bicyclists [LAB], 2008)
[23] (Story, 2008)
[24] (Story, 2008)
[25] (Story, 2008)
[26] (Story, 2008)
[27] (Weber, 2008)
[28] (Centers for Disease Control and Prevention, 2007)
[29] (School District Wellness Policy, 6.12.6.1 NMAC , 2006)
[30] (Lorson, 2009)
[31] (Story, 2008)
[32] (Story, 2008)
[33] (State Nutrition Action Program [SNAP], 2008)
[34] (New Mexico Department of Health, 2008a)
[35] (New Mexico Department of Health , 2008b)
[36] (New Mexico Department of Health , 2008c)
[37] (New Mexico Department of Health , 2008d)
[38] (New Mexico Department of Health, 2008e)
[39] (Centers for Disease Control and Prevention, 2007)
[40] (Centers for Disease Control and Prevention, 2006)
[41] (New Mexico Department of Health, 2009)
[42] (New Mexico Department of Health, 2008f)
[43] (Centers for Disease Control and Prevention, 2007)
[44] (Institute of Medicine, 2007)
[45] (Robert Wood Johnson Foundation, 2009)
[46] (New Mexico Department of Health, 2008a)
[47] (New Mexico Department of Health, 2008a)
[48] (American Cancer Society, 2009)
[49] (New Mexico Department of Health, 2008g)
[50] (Centers for Disease Control and Prevention, 2007)
[51] (New Mexico Department of Health, 2008g)
[52] http://www.ahrq.gov/clinic/uspstfix.htm
[53] (New Mexico Health Policy Commission Quick Facts, 2009)
[54] (New Mexico Health Policy Commission Quick Facts, 2009)
[55] (Matson Koffman DM, 2008)
[56] (Kaiser Family Foundation)
[57] (Institute of Medicine, 2009)
[58] http://www.cancernm.org/bcc/
[59] http://www.icsi.org/index.aspx
[60] (Kane RL, August, 2004)
61 http://www.nmms.org/index.htm
62 http://www.envisionnm.org/
63 http://www.nmtod.com/

Works Cited

Action for Healthy Kids. (2008). *New Mexico profile.* Retrieved February 22, 2009, from http://www.actionforhealthykids.org/filelib/stateaction/profiles/New%20Mexico.pdf

American Cancer Society. (2009). *American Cancer Society Cancer Action Network and Campaign for Tobacco Free Kids. Statewide Survey of 500 New Mexico Registered Voters.*

Centers for Disease Control and Prevention. (2007). *Best Practices for Comprehensive Tobacco Control Programs—2007.* Retrieved February 10, 2009, from http://www.cdc.gov/tobacco/tobacco_control_programs/stateandcommunity/best_practices/00_pdfs/2007

Centers for Disease Control and Prevention. (2007). *Best Practices for Comprehensive Tobacco Control Programs—2007.* Retrieved March 24, 2009, from http://www.cdc.gov/tobacco/tobacco_control_programs/stateandcommunity/best_practices/00_pdfs/2007/B

Centers for Disease Control and Prevention. (2009, February). *National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP)*. Retrieved March 3, 2009, from http://www.cdc.gov/nccdphp/index.htm

Centers for Disease Control and Prevention. (2007). *New Mexico School Health Program Report Card, 2006.* Retrieved March 9, 2009, from http://www.cdc.gov/HealthyYouth/SHPPS/2006/report-cards/newmexico/RC_New_Mexico_SHPPS2006.pdf

Centers for Disease Control and Prevention. (2007). *Smokeless Tobacco Fact Sheet.* Retrieved March 24, 2009, from http://www.cdc.gov/tobacco/data_statistics/fact_sheets/smokeless/smokeless_tobacco.htm

Centers for Disease Control and Prevention. (2006). *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General.* Retrieved March 24, 2009, from http://www.surgeongeneral.gov/library/secondhandsmoke/report/exe

Coleman, K. J. (2005). Prevention of the Epidemic Increase in Child Risk of Overweight in Low-Income Schools - The El Paso Coordinated Approach to Child Health. *Archives of Pediatric and Adolescent Medicine* (159), 217-224.

Institute of Medicine. (2009). *America's Uninsured Crisis: Consequences for Health and Health Care. Report Brief.* (N. A. Press, Ed.) Retrieved March 22, 2009, from www.nap.edu

Institute of Medicine. (2007). *Brief Report: The role of state and localities in reducing tobacco.* Retrieved February 12, 2009, from http://www.iom.edu/Object.File/Master/43/188/Tobacco%20report%20brief%20states%20and%20local%20govt.pdf

Kaiser Family Foundation. (n.d.). Retrieved from http://www.statehealthfacts.org/

Kane RL, J. P. (August, 2004). *Economic Incentives for Preventive Care. Summary, Evidence Report/Technology Assessment No.101.* Agency for Healthcare Research and Quality, Prepared by the University of Minnesota Evidence-based Practice Center under Contract No. 290-02-0009, Rockville, MD.

League of American Bicyclists [LAB]. (2008). Retrieved February 28, 2009, from http://www.bikeleague.org/programs/bicyclefriendlyamerica

Lorson, B. A.-Q. (2009). Correlates of Fruit and Vegetable Intakes in US Children. *Journal of the American Dietetics Association , 109*, 474-478.

Matson Koffman DM, L. A. (2008). *A purchaser's guide to clinical preventive services: a tool to improve healthcare coverage for prevention.* Retrieved March 20, 2009, from http://www.cdc.gov/pcd/issues/2008/apr/07_0220.htm

New Mexico Administrative Code [NMAC] 2006. (n.d.). *(10-31-97; 6.30.2.20 NMAC - Rn, 6 NMAC 3.2.20, 11-14-00; A, 02-14-06). Primary and secondary education, educational standards – general requirements.* Retrieved February 27, 2009, from http://www.nmcpr.state.nm.us/n

New Mexico Department of Health . (2008b). *Complete Indicator Profile of Tobacco Use: Adult Smoking Prevalence.* Retrieved March 24, 2009, from http://ibis.health.state.nm.us/indicator/complete_profile/TobaccoSmokeAdult.html

New Mexico Department of Health . (2008c). *Complete Indicator Profile of Tobacco Use: Youth Smoking Prevalence.* Retrieved March 24, 2009, from http://ibis.health.state.nm.us/indicator/view/TobaccoSmokeYouth.Cnty.html

New Mexico Department of Health . (2008d). *Complete Indicator Profile of Tobacco Use: Adult Smokeless Tobacco Prevalence.* Retrieved march 24, 2009, from http://ibis.health.state.nm.us/indicator/complete_profile/TobaccoSmokelessAdult.html

New Mexico Department of Health. (2006). Retrieved March 11, 2009, from The New Mexico plan to promote healthier weight 2006-2015: http://www.health.state.nm.us/obesity.htm

New Mexico Department of Health. (2008a). *Adults and Tobacco in New Mexico.* Retrieved March 24, 2009, from http://nmtupac.org/reports/pdf/FY08_Adult_Tobacco_Report.pdf

New Mexico Department of Health. (2009). *Calculated variable based on US Census data of NM population residing on tribal lands, which are not covered by Dee Johnson Clean Indoor Air Act.*

New Mexico Department of Health. (2008a). *Complete indicator profile of physical activity: adult prevalence.* Retrieved February 22, 2009, from http://ibis.health.state.nm.us/indicator/complete_profile/PhysicalActAdult.html

New Mexico Department of Health. (2008e). *Complete Indicator Profile of Tobacco Use: Youth Smokeless Tobacco Prevalence.* Retrieved March 24, 2009, from http://ibis.health.state.nm.us/indicator/view/TobaccoSmokelessYouth.Year.NM_US.html

New Mexico Department of Health. (2007). *Coordinated Approach To Child Health.* Retrieved February 27, 2009, from http://diabetesnm.org/programs/catch.htm

New Mexico Department of Health. (2008, December). *Highlights of New Mexico Vital Statistics, 2006.* Retrieved March 12, 2009, from http://www.health.state.nm.us/epi/pdf/ER%20Vital%20Stats%2012122008.pdf

New Mexico Department of Health. (2008g). *NMDOH Tobacco Use Prevention and Control Program Progress Report, FY08.* Retrieved February 16, 2009, from http://nmtupac.org/reports/pdf/FY08_TUPAC_Progress_Report.pdf

New Mexico Department of Health. (2008f). *Tobacco-Related Disparities Strategic Plan.* Retrieved March 24, 2009, from http://nmtupac.org/reports/pdf/Tobacco_Disparities_Strategic_Plan.pdf

New Mexico Health Policy Commission Quick Facts. (2009). Retrieved February 22, 2009, from http://hpc.state.nm.us/

Partnership for Prevention. (2008b). *Places for physical activity: facilitating development of a community trail and promoting its use to increase physical activity among youth and adults—an action guide.* Washingto, DC.

Partnership for Prevention. (2008a). *School-based physical education: working with schools to increase physical activity among children and adolescents in physical education classes—an action guide.* Washington, DC.

Partnership for Prevention. (n.d.). *Taking Action to Prevent Chronic Disease.* Retrieved February 2, 2009, from www.Prevent.org: http://www.phabc.org/pdf/PFP-C2A-9-6-final.pdf

Prevention Institute. (February 2008). *Restructuring Government to Address Social Determinants of Health.* Report from the Healthier America California Convening, Sacramento.

Robert Wood Johnson Foundation. (2009). *SCHIP Expansion Financed With a 62-Cent Increase in the Federal Cigarette Tax.* Retrieved February 16, 2009

Roux, L. P. (2008). Cost effectiveness of community-based physical activity interventions. *American Journal of Preventive Medicine , 35* (6), 578-588.

(2006). *School District Wellness Policy, 6.12.6.1 NMAC .*

State Nutrition Action Program [SNAP]. (2008). *Government Food Assistance Programs.* Retrieved March 9, 2009, from http://www.oaaa.state.nm.us/SNAP%20Brochure.pdf

Story, M. K.-O. (2008). Creating healthy food and eating environments: Policy and environmental approaches. *Annual Review of Public Health , 29*, 253–72.

Task Force on Community Preventive Services. (2002). Recommendations to increase physical activity in communities. *American Journal of Preventive Medicine , 22* (4S), pp. 67-72.

The Milken Institute. (2007, October). *An Unhealthy America: The Economic Burden of Chronic Disease.* Retrieved February 22, 2009, from http://www.milkeninstitute.org/pdf/chronic_disease_report.pdf

Weber, J. A. (2008). More than a farm bill: Food, Conservation, and Energy Act of 2008. *Journal of the American Dietetics Association , 108* (9), 1432-1438.