DCHSC 2-25-13
Dr. Jeff Johnston

TESTIMONY BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON COMMUNITY HEALTH February 25, 2013

My name is Dr. Jeff Johnston. I am President of the Michigan Dental Association and I am a periodontist in Macomb County.

On behalf of the Michigan Dental Association I want to thank you for allowing me the opportunity to come before you today to testify on the Medicaid budget. The Michigan Dental Association represents more than 5000 Michigan dentists, and we are very interested in the outcome of the state budget.

The Michigan Dental Association strongly supports the Governor's proposal to expand the Healthy Kids Dental program to all areas of the state. In addition, we urge you to keep the funding as recommended for adult dental Medicaid and Donated Dental. [Healthy Kids Dental is $3.9 million GF/$7.7 million fed. match for $11.6 million total; adult dental Medicaid is at $7 million and Donated Dental is in at $151,000].

All three of these programs save the state money. Healthy Kids Dental is a very successful program and a national model for dental care for underprivileged children. The program is administered through Delta Dental of Michigan and the reimbursement rate is at Delta's PPO rate, which is higher than regular Medicaid, but still below the "usual and customary fee" charged by dental providers. This unique program has

dramatically increased patient utilization and dentist participation. HKD is currently in 75 of Michigan's 83 counties.

Adult dental Medicaid provides for dental care for adults. This includes many special needs populations like the mentally and physically impaired, and the elderly. Reimbursement rates for this program are very low. The national average for Medicaid reimbursement is approximately 60 % of a dentist's usual fees, which is about the rate necessary for dentists to break even. In Michigan, however, dentists who treat Medicaid-enrolled children are reimbursed at about 41 percent of their usual fee and 25% of their usual fee for adults. This, coupled with the fact that it is sometimes difficult to get paid by Medicaid, causes the participation rate of dentists to be significantly lower than in the Healthy Kids program.

In spite of the lower rates, dentists do participate and the services they provide save the state money. In years when adult dental Medicaid was not funded in the state budget, hospitals reported a significant increase in the number of emergency room visits for dental problems. In 2008, visits increased about 15%. We all know that ER visits are far more costly than a trip to the dentist. Additionally, most ER doctors can only treat the symptoms, they cannot fix the problem. So, in most cases the person must be treated again and again.

The Donated Dental Services Program is equally important. The money for this program pays for supplies, phones, computers and two full time employees who enlist dentists and labs to donate their services for the permanently disabled, chronically ill or elderly. These services include such extensive treatment as dentures, crowns, partials and oral surgery. These are people who are not covered by Medicaid or other

programs. In 2012 alone, the donated dental services program arranged for $1, 470,000 in donated services for 505 patients. Quite a return on a $150,000 investment by the state.

The Michigan Dental Association commends the Governor for his budget recommendations pertaining to these critical issues. The importance of oral health to our overall health is a key component in keeping the people of Michigan healthy. We hope you are able to support these recommendations as proposed by the Governor.

Again, thank you for your time and I would be happy to answer any questions.

DCHSC 2-25-13
Dave Finkbeiner
Laura Appel

MICHIGAN HEALTH & HOSPITAL ASSOCIATION

Advocating for hospitals and the patients they serve.

Testimony before the House Appropriations Subcommittee on the

FY 2014 Community Health Budget

February 25, 2013

Laura Appel, Vice President of Federal Policy and Advocacy and David Finkbeiner, Senior Vice President of Advocacy – Michigan Health & Hospital Association

Good morning and thank you, Mr. Chairman and to the committee for the opportunity to comment on the Governor's recommendation for the fiscal year 2014 budget for the Department of Community Health and, specifically, for Medicaid. We are here today on behalf of more than 130 community hospitals across the state, that provide care to millions of patients, even those who can't pay, 24-hours-a-day, 7 days a week.

As you are all well aware, the Governor's budget includes a recommendation that the state act to accept the federal government funding to expand Medicaid to everyone in Michigan who lives at or below 133 percent of the federal poverty level. Achieving universal coverage has been a goal of Michigan's health care community for decades and the opportunity presented to expand Medicaid will significantly reduce the number of uninsured. We applaud the Governor for making expansion a part of his executive recommendation and we very much appreciate that the Governor stopped by our recent Save Lives, Save Money coalition press conference to make his announcement of support in-person.

Expanding coverage for those in our communities who are least able to afford their own health care bills is simply the right thing to do. However, in this case it also makes fiscal sense, because expanding Medicaid allows Michigan to save millions of dollars in general funds that it is currently spent on the same population. Some have argued that the federal government could back off from its promise to fully support the Medicaid expansion in the first three years, or could withdraw the higher matching rates in out years. The MHA agrees that this will be a risk. However, in a document of frequently asked questions dated December 10, 2012, the Centers for Medicare and Medicaid Services makes it very clear that states have the option of making a u-turn on Medicaid expansion. To quote from question 25: ***If a state accepts the expansion, can a state later drop out of the expansion program? Answer:*** Yes. A state may choose whether and when to expand, and, if a state covers the expansion group, it may decide later to drop the coverage. The MHA is confident that Michigan will continue to have flexibility to make its own decisions about Medicaid expansion and what is best for our state.

There are two pressing issues in the executive recommendation that we want to bring to your attention. Both issues have received significant support from this committee in previous budget deliberations.

1. Financing for graduate medical education is again cut by $4 million dollars. This is done at a relatively minor reduction of general funds, about $1.5 million. But cutting GME is counter-intuitive to our need to grow and replace our physician population in Michigan. We do a great job of post-graduate physician education in Michigan. Reducing GME by another $4 million puts more than 50 physician residencies at risk of being eliminated in our state. We ask that you reinstate the necessary $1.5 million in general funds to support graduate medical education.

2. In the past, this committee has been steadfast in support of a modest pool of funding to assist small and rural hospitals. In fiscal year 2012, you set aside $29.5 million for these hospitals to move toward cost-based reimbursement for their Medicaid services. This funding also expanded to include hospitals that are still providing labor and delivery services in smaller communities and to ensure appropriate levels of access to health care. In fiscal year 2013, the amount grew to $36 million, roughly $12 million general funds, in recognition that the fund assisted more than 60 hospitals to maintain critical access to care and positively impact health care related employment in rural communities. We are grateful for this support and hope that you agree this funding needs to continue into fiscal year 2014. There is no boilerplate in the executive recommendation related to the small and rural hospital cost-based reimbursement pool. We further ask that the committee consider an update to the boilerplate governing the expenditure of these funds. We are not asking for a change in purpose, rather some clarification to recognize the original purpose. We will meet with Chairman Lori and the other committee members to explain this request when the boilerplate language is drafted.

In closing, we thank the Governor for moving forward on Medicaid expansion, we thank the committee for its support of adequate Medicaid funding in previous Community Health budgets and for your time today. We hope you will consider our requests favorably and we are willing to answer any questions you may have.

Diabetes and Kidney Programs Supported by the Michigan Department of Community Health

The Problem

Obesity → Causing Type 2 Diabetes → Causing kidney disease/failure

Prevention is possible in every part of this equation

Obesity:

- Michigan is the 5th most obese state in the nation.
- Over 66% of Michigan adults are overweight or obese.
- Obesity is directly correlated with type 2 diabetes.

Diabetes:

- Over 13% of Michigan adults have diabetes, but one third (1/3) don't know it.
- Over 29% of Michigan adults have pre-diabetes (blood sugar levels higher than normal). Most will develop type 2 diabetes without lifestyle changes.
- Diabetes is directly correlated with kidney disease and kidney failure.

Kidney Disease/Failure:

- Over 9% of Michigan adults have chronic kidney disease, but most don't know it.
- Diabetes is the leading cause of kidney failure.

The Solution

Reducing obesity, diabetes, and kidney disease can be achieved through:

- Community programs that are evidence based and produce results
- Collaborative partnerships: MDCH, schools, Head Starts, community-based organizations, non-profits, faith-based organizations, health plans, medical professionals, etc.
- Programs focused on minority populations at higher risk for diabetes, high blood pressure, and kidney disease
- Leveraging match funding
- Alignment with the Health and Wellness 4 x 4 plan

4 Key Health Behaviors	4 Key Health Measures
1. Maintain a healthy diet	1. Body Mass index (BMI)
2. Engage in regular exercise	2. Blood Pressure
3. Get an annual physical exam	3. Cholesterol Level
4. Avoid all tobacco use	4. Blood Sugar/Glucose Level

Please support prevention of obesity, diabetes, and kidney disease through funding that is consistent with, or above last year's funding.

Sally Joy & Lindsay Bacon, National Kidney Foundation of Michigan
lbacon@nkfm.org or sjoy@nkfm.org

National Kidney Foundation™ of Michigan
734-222-9800
www.nkfm.org

Billy Jays L. Bacon DCH SC 2-25-13 #1042

Prevent Obesity, Diabetes & Kidney Disease to Create A Healthier Michigan

2013 Guide for Michigan Policy Makers

The Challenge:

- **Michigan is the 5th most obese state in the nation.**
- 66% of Michiganders are overweight or obese. 10% have diabetes.
- As much as 80% of diabetes can be attributed to obesity.
- Over 1/3 of Michigan adults are at high risk for developing kidney disease.
- Over 70% of kidney failure is caused by uncontrolled diabetes and high blood pressure.

- People with chronic conditions account for 84% of all health care spending.
- Only 1% of health care dollars are spent on prevention.
- Diabetes cost Michigan $9 billion in 2009.

Legislators - A Call to Action!

1. Support the Diabetes and Kidney Programs line in the Michigan Department of Community Health Budget.

This state funding is crucial to tipping the needle on obesity, diabetes and complications such as kidney failure. **More funding is necessary to improve the health of your district and our state.**

2. Consider Health in ALL policies.

Good health is created through communities, the health care system, housing, transportation, and more.

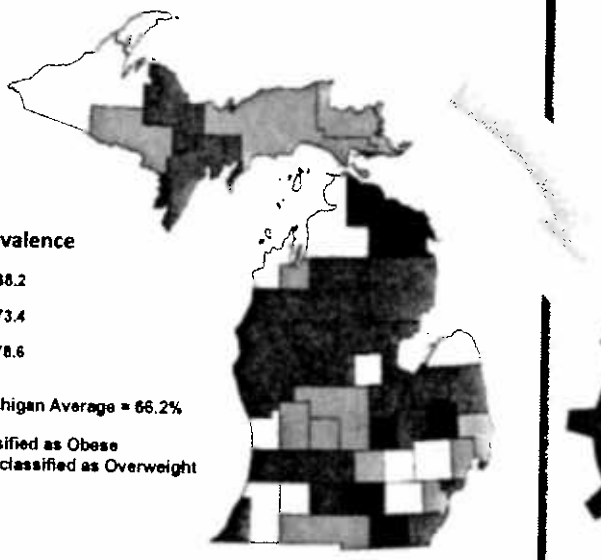
3. Relentless Positive Action!

The programs of the Diabetes and Kidney Line work with Michigan's 4 x 4 Plan, which encourages 4 healthy behaviors and knowledge of 4 important health measures.

The health of Michigan residents is vital to the success of our state and will contribute to a stronger workforce and a growing economy.

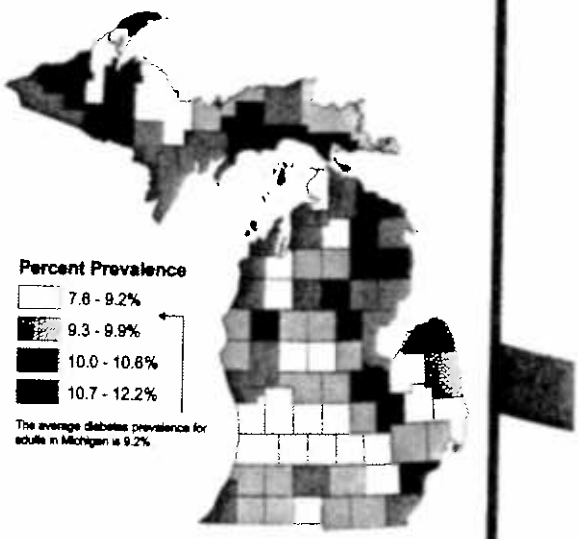
Your District?

Overweight & Obese



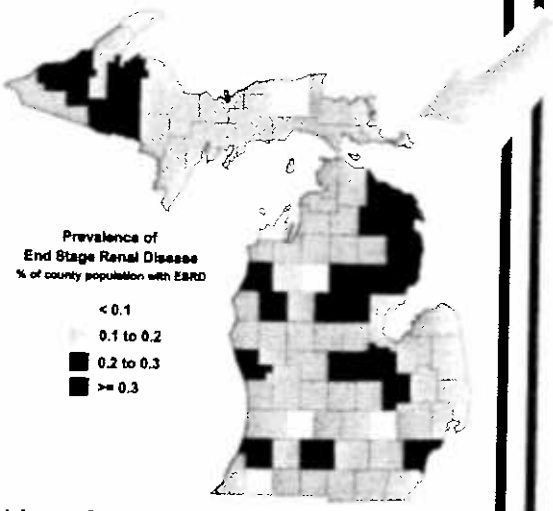
- If obesity rates continue, related health care will cost Michigan $12.5 billion in 2018.
- It is predicted that Michigan could save $24.1 billion if average BMI is reduced by 5%.

Diabetes



- Diabetes is the leading cause of kidney failure, blindness and lower-limb amputation.
- Prediabetes and diabetes together cost the nation $218 billion in 2007.
- If diabetes prevalence continues to grow at the same pace, the economic burden alone will double in size to $336 billion nationally by 2034.
- Researchers found that for each 10% increase in public health spending, there was a decrease in deaths from diabetes of 1.4%.

Kidney Failure



- For people with kidney failure, either dialysis treatments or a kidney transplant are necessary to sustain life.
- The average per person per year cost for treating kidney failure is approximately $80,000.
- Researchers estimate that slowing the progression of kidney failure by 20% would save approximately $39 billion over 10 years.
- Kidney failure costs in Michigan were $1.6 billion in 2010. (cost Medicaid an estimated $42 million

Program Dashboard

This dashboard provides a quick assessment of the performance of programs of the Diabetes and Kidney Programs line in the Michigan Department of Community Health budget.

2012 Programs for Preventing Diabetes and Kidney Disease

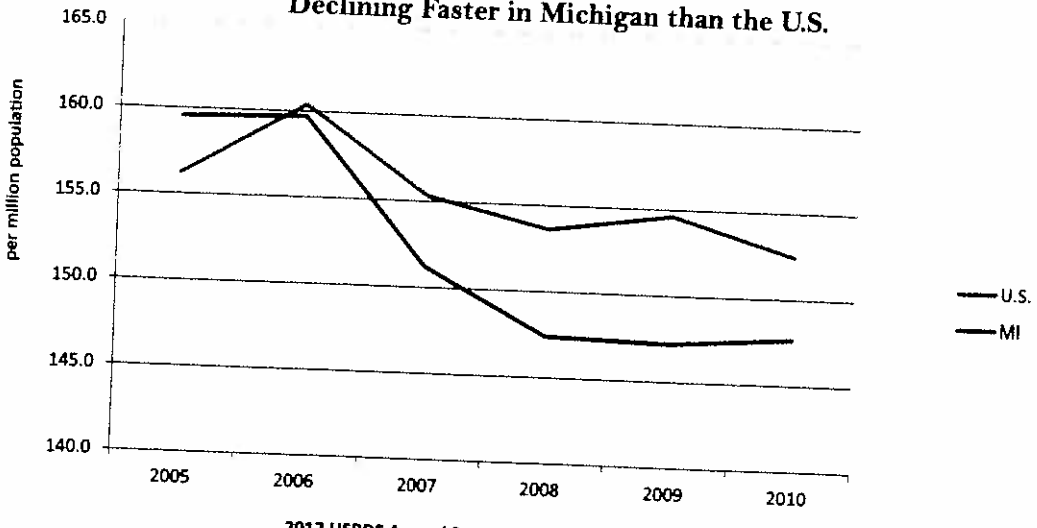
- **Regie's Rainbow Adventure®:** Over 50% of children increased their daily serving of fruits and vegetables.
- **Healthy Families Start With You:** Served 407 clients. Over 60% of program participants ate healthier meals.
- **PE-Nut (Physical Education and Nutrition):** Served over 20,000 children and their families. More than 30% of students plan to increase their physical activity.
- **Healthy Kids and Kidneys:** Nearly 80% of classrooms showed an increase in the amount of physical activity children received during the school day.

Programs for Managing Chronic Diseases to Prevent Complications

- **Personal Action Toward Heath (PATH):** In 2012, 99% of participants reported that they will use the tools they learned in the workshop to better manage their health.
- **EnhanceFitness:** In 2011, over 75% of participants reported improvement in their physical ability after participating in the classes.
- **Healthy Hair Starts with a Healthy Body® and Dodge the Punch: Live Right®:** Served 2,400 clients. 85% made at least one healthy lifestyle change.

Movement in the Right Direction

Although Diabetes is the Leading Cause of Kidney Failure, Kidney Failure from Diabetes is Declining Faster in Michigan than the U.S.



2012 USRDS Annual Report, Incidence Table A.9(2)

Reducing kidney failure lowers health care costs for employers, Medicare, and Medicaid.

State Supported Programs Produce Results!

Prevention Programs for Children

The Michigan Department of Community Health and partner organizations teach children about eating healthy, positive physical activity habits, and embracing healthy lifestyles.

- **Regie's Rainbow Adventure®** Teaches elementary-aged children healthy living through a storybook hero named Regie.
- **Healthy Families Start with You** Educates parents and kids in Head Start programs about making healthy lifestyle changes.
- **PE-Nut (Physical Education and Nutrition)** Expands on Michigan's grade school physical education programs by infusing nutritional education into daily exercise to encourage healthy lifestyle habits.

- **Kidney Programs in Schools** Teaches children about how healthy lifestyles can prevent kidney disease.

Preventing Diabetes for Those at Risk

- **The National Diabetes Prevention Program (NDPP)** is aimed at preventing diabetes for people with prediabetes and/or other risk factors for type 2 diabetes. This program focuses on making lifestyle changes such as reducing body weight, increasing physical activity, and reducing consumption of fatty foods. Lifestyle changes such as losing 5-7% body weight and being active 30 minutes or more a day most days are proven to reduce diabetes risk.

The Facts

- **2.6 million people in Michigan have prediabetes,** a condition which puts people at very high risk for type 2 diabetes.
- There are nine recognized organizations in Michigan delivering the NDPP, with 35 trained lifestyle coaches.

Treating 100 high risk adults:

- Prevents 15 cases of type 2 diabetes.
- Prevents 162 missed work days.
- Avoids the need for medication for high blood pressure and high cholesterol in 11 people.
- Avoids $91,400 in health care costs.
- Adds the equivalent of 20 years of health.

Managing Chronic Conditions

Managing chronic conditions saves money and improves quality of life. These state funded programs are evidence based and produce results.

- **Diabetes Self Management Education (DSME)** teaches people with diabetes the skills to manage their condition and prevent complications.
- **Personal Action Toward Health (PATH)** helps adults to navigate the health care system and manage chronic conditions.
- **EnhanceFitness** is a physical activity class for those with chronic conditions.

- **Healthy Hair Starts with a Healthy Body® and Dodge the Punch: Live Right®** are programs that provide health information to African American adults through their salon stylist or barber.

Targeting Rural Communities

- **The Northern Michigan Diabetes Initiative (NMDI),** based in Traverse City, is an 11-county collaborative of health and community organizations focused on reducing the impact of diabetes in rural Michigan. Since 2006, NMDI has helped to increase diabetes management and screenings.

National Kidney Foundation™ of Michigan
www.nkfm.org 800 482 1455

Only 5% of charities receive 4 stars from Charity Navigator 5 years in a row.

DCH SC 2-25-13
Jackie Doig

CENTER *for* CIVIL JUSTICE

Fighting Poverty Through Advocacy.

Testimony to the House Appropriations Subcommittee on Community Health

FY 2014 Department of Community Health Appropriations

February 25, 2013

Chairman Lori and members of the subcommittee, my name is Jackie Doig. I am a senior staff attorney with the Center for Civil Justice (CCJ), a non-profit law firm with offices in Saginaw and Flint. We represent low income clients in mid-Michigan and the Thumb, including Clare, Gladwin, and Midland Counties.

CCJ advocates for people in Michigan who need help meeting their basic needs. CCJ uses legal expertise, informed by the experiences of low income people, to monitor and improve public policy and access to governmental programs and services

CCJ works closely with private, non-profit human services providers throughout our service area, including faith-based organizations, non-profit health clinics, and the myriad of agencies that attempt to fill the gaps when low income individuals are uninsured or cannot access necessary medical care. We also receive a local grant to provide direct advocacy for low income clients in Genesee County who need help with access to governmental health programs.

*****

I am here to speak in strong support of the Governor's position that **Michigan should accept the federal dollars available to provide health coverage to hundreds of thousands of uninsured people in Michigan through the Medicaid program.**

The Michigan Medicaid program has a proven track record of using tax dollars efficiently and effectively. Michigan should not turn away federal dollars available to expand that program to cover people with very low income who are uninsured in Michigan.

Hardworking families need the security of knowing that they will not face huge medical bills and financial ruin if they become sick.

***

As you consider this question, please think first and foremost about the lives of your constituents that will be dramatically improved by accepting the federal money for healthcare.

After more than 30 years of working for low income people, I have represented thousands of clients facing incredible hardship, but nothing would be more tragic than having to continue hearing stories of the suffering caused by lack of health care coverage after January 1, 2014, when there is absolutely no reason for that hardship to continue.

over →

I don't want to hear from another mother with organ failure who cannot get onto the transplant list because her income is a little too high to qualify for Medicaid and she cannot afford the testing that needs to be done in order for her to qualify for a transplant.

I don't want to see another low income mother near collapse from exhaustion because while she is working to try to keep her family afloat, her fear that her husband's chemotherapy treatment will not be successful is compounded by fear and depression that her family is being financially ruined by the costs of her husband's cancer treatment that they cannot afford.

I don't want to see another middle-aged man, struggling to make ends meet when he lost his job and could not find another, who watched his wife nearly die from blood loss before she could access surgery for complications of her colitis, and then faced bankruptcy because of the medical bills.

These are the stories of real people. All of these people could be helped if we accept the federal dollars to expand Medicaid. I don't want to be the person facing these folks, or others like them, if they still don't have health insurance in 2014 because Michigan turned down the federal money for expansion.

***

Accepting the federal dollars will prevent the gap in coverage that would otherwise be created for low income families and individuals whose incomes are too high for them to qualify for Medicaid under our extraordinarily low income limits (less than 50% of the federal poverty level), but are too low to qualify for federal subsidies to purchase private health insurance through the Exchange, which will not be available to people with income below 100% of the federal poverty level.

Accepting the federal money will allow Michigan to ensure health care dollars are spent more wisely, avoiding costly an unnecessary emergency room use, and assuring access to preventive care and treatment for chronic conditions before they reach crisis proportions and require hospital- based care or result in long term disability. Right now, we end up paying for only the most expensive care for low income, uninsured people in Michigan.

Expanding coverage for low income adults supports the priorities of improving education and expanding employment. On an individual basis, you simply cannot be a good worker and keep a job, or succeed in pursuing education or training, without being healthy.

It also supports and stabilizes families. Michigan has been extraordinarily successful in enrolling children into Medicaid and MIChild, thus ensuring access to checkups, preventive care, and treatment for chronic diseases like asthma. But those same children suffer when their mother or father cannot access needed medication for chronic health conditions like high blood pressure, or diabetes, or treatment for mental health problems like depression.

On a broader scale, accepting the federal dollars to expand health coverage will support our economy by bringing federal dollars into the state, which will support our health care systems, expand employment opportunities for health care workers, and generate economic activity as the dollars are spent in local businesses.

***

Thank you again for the opportunity to testify. I would be glad to answer any questions you may have.

DCH SC 2-25-13

House Appropriations Subcommittee on Community Health
February 25, 2013

Testimony from:
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Local Contact:
Judy Stewart, Director, State Government Relations
American Cancer Society Cancer Action Network
1755 Abbey Rd., East Lansing, MI, 48823
248-259-1369/judy.stewart@cancer.org

Dear Chairman Lori and the Members of the House Appropriations Subcommittee on Community Health:

On behalf of the American Cancer Society Cancer Action Network (ACS CAN), I would like to thank you for the opportunity to provide comments on the issue of Medicaid expansion under the Affordable Care Act in the state of Michigan.

To put our comments in context, it is important to understand the burden of cancer. One in two men and one in three women will be diagnosed with cancer in their lifetime. The American Cancer Society estimates that 57,560 new cases of cancer will be diagnosed and that approximately 20, 570 cancer deaths will occur in Michigan in 2013.[1]

Cancer and the uninsured

To reduce this burden, ACS CAN believes that policymakers should take an aggressive approach to fighting cancer. It is important that measures be enacted to ensure that people have access to adequate and affordable healthcare. This is one of the most effective ways to prevent and detect cancer early, treat cancer effectively and bolster the quality of life of patients enduring cancer treatment.

According to the U.S. Census Bureau, there were more than 1,200,000 Michiganders who did not have health insurance in 2011, (or 12.5% of the state population).[2] Two major areas of concern for an individual who receives a cancer diagnosis are "what are the chances of recovery" and "what is the cost of treatment"?

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[1] American Cancer Society, "Cancer Facts & Figures, 2012, Updated." Atlanta: American Cancer Society, 2012.

[2] United State Census Bureau, see: http://www.census.gov/hhes/www/hlthins/data/historical/HIB_tables.html, accessed 11/12/12, Table HIB-4, "Health Insurance coverage Status & Type of Coverage by State All People: 1999 to 2011.

Individuals lacking health insurance are less likely to get recommended cancer screenings and are more likely to be diagnosed with cancer at later stages.[3] For example, uninsured women diagnosed with breast cancer are 2.5 times more likely to have a late stage diagnosis than women enrolled in private health insurance.[4]

Research also indicates that approximately 10 percent of cancer patients are uninsured at the time of diagnosis.[5] Equally troubling, about one-third of cancer survivors report a loss of health insurance at some point in time since their diagnosis.[6]

Assuring that every Michigander has access to adequate health insurance is important to all these issues. It has been demonstrated that the uninsured and underinsured are more likely to develop cancer, to have their cancer detected later and to receive inadequate treatment. Simply stated, ACS CAN's goal to reduce and eliminate cancer morbidity and mortality cannot be realized without adequate health care access.

Medicaid coverage helps save lives from cancer

Individuals enrolled in Medicaid have better access to health care than do the uninsured. If they get cancer, it's more likely to be discovered at an early stage and, compared to the uninsured; they have better access to outpatient and hospital care and prescription drugs.

Thousands of hard-working, low-income Michigander continue to lack access to healthcare coverage. Increasing access to health care coverage to those at or below 133% of the Federal Poverty Level ($15,282 for an individual or $31,322 for a family of four) will ensure that Michigan families have access to cancer prevention and early detection services. Additionally, participation in the Medicaid expansion, will allow more Michiganders to, see a doctor regularly, access preventive services such as pap smears, mammograms and smoking cessation aids and avoid unnecessary visits to the emergency department. Access to these critical services enhances the likelihood of detecting cancer at an earlier, more curable and much less expensive stage.

Studies show that individuals enrolled in Medicaid, receive life-saving preventative screenings at higher rates than the uninsured and close to the same rate of those enrolled in private insurance. More than half (56%) of the women aged 40 to 64 enrolled in Medicaid received a mammogram in the past two years, compared to 38% of uninsured women, and 56% of insured women aged 40 to 64.[7] Also, 74% of women aged 18 to 64 enrolled in Medicaid received a Pap smear in the past 3 years, compared to 68% of uninsured women, and 87% of insured women aged 18 to 64.[8]

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[3] Halpern MT, Bian J, Ward EM, Schrag NM, Chen AY. "Insurance status and stage of cancer at diagnosis among women with breast cancer." *Cancer* 2007; 110: 403-11.
[4] Kaiser Commission on Medicaid and the Uninsured. "The Uninsured: A Primer. Key Facts About Americans Without Health Insurance," January 2006.
[5] Thorpe KE, Howard D. "Health Insurance and Spending Among Cancer Patients" Health *Affairs 2003. W3; 189-198.*
[6] American Cancer Society Cancer Action Network. "Facing Cancer in the Healthcare System: A National Poll." May 21 – June 10, 2010. http://www.acscan.org/healthcare/cancerpoll.
[7] Ward et al. "Association of Insurance with Cancer Care Utilization and Outcomes," A Cancer Journal for Clinicians Volume 58 Number 1 January/February 2008. American Cancer Society Surveillance Research Update 2011.
[8] Ward et al. "Association of Insurance with Cancer Care Utilization and Outcomes," A Cancer Journal for Clinicians Volume 58 Number 1 January/February 2008. American Cancer Society Surveillance Research Update 2011.

ACS CAN realizes that the state of Michigan faces significant budget challenges and we encourage you to consider the financial benefit of the Medicaid expansion. Under the ACA, the federal government will pay for 100% of the Medicaid expansion and no less than 90% of the cost to provide health care coverage to working, low-income Michiganders, beyond 2020.[9] As Governor's Snyder's FY14 budget proposal indicates, Michigan could experience economic activity that would allow more than $20 billion to flow into the state and result in $1.2 billion in General Fund savings through 2020.

Should the Legislature support the Governor's decision to accept the millions of dollars of federal funding being offered to the state of Michigan, to increase access to health coverage through Medicaid – an estimated 320,000 individuals would gain access to timely, appropriate and affordable health care coverage[10]. Further, Michigan will greatly assist in the effort to eliminate cancer as a major health problem.

For this reason, ACS CAN urges the House of Representatives to pass legislation, supporting Governor Snyder's decision to accept the millions of dollars of federal funding being offered to Michigan to increase access to health coverage through Medicaid.

As you consider this unique opportunity, I urge you to remember that the only way we can successfully reduce cancer incidence and mortality in Michigan, is through increased access to health care coverage and insurance. Thank you for the opportunity to comment on the critical health care decisions that lay ahead of this committee and the Michigan Legislature.

Sincerely,

Citseko Staples Miller
American Cancer Society Cancer Action Network

[9] The Kaiser Family Foundation, "State Medicaid Fact Sheets," Available at: http://www.statehealthfacts.org.
[10] The Kaiser Family Foundation, "The Cost and Coverage Implications of the ACA Medicaid Expansion: National and State-by-State Analysis ," Available at: http://www.kff.org/medicaid/upload/8384.pdf

DCH SC 2-25-13

House Appropriations Subcommittee on Community Health
Scott Olmstead, American Cancer Society Cancer Action Network Volunteer

Testimony—February 25, 2013

Thank you and good morning/afternoon everyone. My name is Scott Olmstead and I am from Charlevoix, Michigan.

I'm here today as a volunteer for the American Cancer Society Cancer Action Network and one of the more than 400,000 Michiganders who would benefit by increasing access to health care through the Medicaid program.

In my case, I lost my employer sponsored health insurance when my employer, Duratech, completed its contract with Consumers Power in 2006, and my job left the state. As a health conscious person, I did not want to live without health coverage so I continued my insurance with them through COBRA for as long as possible. When that expired I purchased a plan on the individual market—a plan I held through 2009.

However, with limited income as a seasonal gardener, and limited job opportunity in Northern Michigan, I reached a point where I had to make a choice between paying my utility bills or paying for health insurance. I really had no choice. I had to let my insurance lapse so I could make ends meet.

As I said before, I have always made my health a priority. I always got my annual physical and made sure I took advantage of recommended screenings and preventative care. But when I lost my insurance, I could no longer do those things—I simply had to take my chances that I wouldn't become seriously ill.

Then, in 2011 my luck eventually ran out. I started experiencing pain in my upper stomach and I suspected that I had a hiatal hernia. I lived with the pain for a while until early 2012 I happened by chance to see an article in the paper about the Department of Community Health colon cancer screening program that offered free colonoscopies for the uninsured and underinsured and I figured it would be a good idea to get it checked out.

Fortunately for me the doctors found and removed an unusual and significant precancerous polyp that was the cause of my pain. Though the polyp had not spread, my doctor told me that the type of polyp indicated that I could get more in the future and that if left untreated, could turn into advanced cancer that would be much harder to survive.

They also informed me that I would need to get retested within the next five years. However, without access to affordable health care I know that I won't be able to pay for the test out-of-pocket. And if further procedures or treatment is needed as a result of the findings, there's a very good chance my recovery would be in jeopardy simply for lack of money.

I know that I am not alone. There are many people like me who, without meaningful, affordable health care through an expanded Medicaid program, may be forced to suffer unnecessary health consequences.

I'm ready to take responsibility for my health—I just need the opportunity to do so. Like so many others I am being squeezed by my limited financial ability and increasing expenses. I would just like the opportunity to stay healthy and not be a burden to the health care system, my family and the community.

Thank you for the opportunity to share my story with you, and I hope you make the right decision so that people like me can get the access to the care we need, take advantage of cancer screenings, and remain productive contributors to our economy instead of becoming ill and non-productive because we can't get the health care we need.

I came here today to ask you to help me, and thousands others like me, live our lives to our full potential. I would like to attend my son's wedding this fall and be there for him for many years as his family grows. I have always been a self-sufficient person and I want to teach my grandchildren this important virtue. I have built my own house, with my own hand sewn lumber and my own sweat. I am fully capable of taking care of myself and tending to the needs of my family. I look forward to teaching my grandchildren how to garden....and how to paddle

their own canoe...how to be independent. With your help I'll have the health I need to be able to do just that.

Scott Olmstead
6466 Pincherry Rd
Charlevoix, MI 49720

DCHSC 2-25-13
Amy Zaagman

MICHIGAN COUNCIL FOR Maternal & Child HEALTH

EXECUTIVE DIRECTOR
Amy Zaagman
azaagman@mcmch.org

Written comments for House DCH Appropriations Subcommittee hearing on 2/25/13

Dear Chairman Lori and members of the subcommittee:

Good morning, my name is Amy Zaagman and I am the executive director of the Michigan Council for Maternal and Child Health. Through Council membership, large hospital systems, statewide organizations, smaller local entities -- all come together around the belief that through a collective voice we can impact policy and encourage the need to invest in prevention strategies that will improve maternal and child health in Michigan.

We would like to use that voice today to support the executive budget put forward by Governor Snyder. Multiple areas of the proposal including increases in funding that keep pace on such issues as newborn screening, lead testing, and children's access to dental homes are to be applauded.

We are encouraged by the Governor's commitment to infant mortality, not only through establishment of an Infant Mortality Steering Committee, but also through the specific appropriations he has called for in this proposal. We are anxious to see additional detail on the $2.5 million tagged for infant mortality and want to work with you to keep that money in the budget for efforts such as perinatal regionalization, unintended pregnancy prevention and promotion of safe sleep. In 2012, we lost over 140 babies in Michigan to unsafe sleep environments – preventable deaths that if we could stop would bring our infant mortality rate down below the national average.

As Director Haveman shared with you, over 14,000 children with serious medical diagnoses enrolled in the Children's Special Health Care Services Program and also eligible for Medicaid have just recently transitioned to the Medicaid health plans. We are working closely with the administration and other stakeholders to monitor implementation of the move -- to ensure children are not harmed and that families continue to be at the center of their care. While we are grateful that no specific cuts to the medical care and treatment of the children have been proposed, we remain mindful that if savings estimated are not realized, we must work with you to protect this critical program.

As part of the Affordable Care Act, primary care and family practice physicians along with pediatricians were recognized for the critical access they provide and states are receiving a supplemental payment to bring Medicaid rates paid to those providers up to Medicare levels. Unfortunately, despite their high Medicaid loads and critical care provided, obstetricians/ gynecologists were left out of this group. In the current year budget, $4 million GF was allocated to increase payments to OB/GYNs and we would urge continuation of at least that amount. A variety of factors including retention of residents, high malpractice insurance and high Medicaid birth rate are threatening the availability of and access to OB/GYNs in our state.

Great strides have been made in the last decade to reduce the number of lead poisoned children in Michigan, but we still have over 7,000 children who have lead levels that require action. State funding for lead poisoning prevention and treatment was eliminated in 2010 and federal funding was cut last year; despite creative efforts to find funding for the current year budget Michigan's abatement program is struggling. To help identify, treat and ensure the safety of lead-poisoned children and avoid the billions of state and societal costs which result from the lowered academic achievement, other behavioral difficulties and proven link to violent crime, we need to invest in all three pieces: effective testing requirements, proper analysis and lab resources and a real ability to abate properties where children live.

It is encouraging to see Governor Snyder recognizing the vast potential -- in both economic and human terms -- of providing services early to young people with brain disorders. The increased attention and funding for autism treatment as well as the $5 million proposed for youth experiencing serious emotional disturbances are welcome and we encourage your support.

We are anxious to hear more detail on Wednesday about what programs are to be included in the Health and Wellness Initiatives line in the Governor's budget. Because of "one-time" funding tags in the current year budget, we are very concerned about funding for obesity reduction, pregnancy prevention programs, and the Michigan Model for School Health evidence-based health curriculum offered in schools.

The state funding for the Michigan Model for Health (MM) is particularly critical to maintain as federal funding sources have dried up in recent years. The MM is the core of coordinated school health with its eight components: Nutrition Services, Family & Community Involvement, Counseling and Social Services, Health Promotion for Staff, Health Services, Physical Education, Health Education and a Healthy School Environment. Director Haveman pointed out last week that the vast majority of downstream health care spending is related to personal choices and lifestyles and while we agree that a large degree of one's health is personal responsibility, the argument falls flat with regard to children. We believe that through coordinated school health teams that incorporate the continuum of services and education needed that we can impact the next generation. A minimal investment would allow us to aggressively pursue Medicaid matching strategies to make more opportunities available for children.

And last, but certainly not least, is our support for the proposed Medicaid expansion in Michigan. While pregnant women and infants are already covered up to 185% of the federal poverty limit (FPL), increasing the basic Medicaid eligibility to 133% of FPL will have a distinct impact on women's access to preconception care and infant mortality. Numerous studies point to preexisting obesity, hypertension, diabetes, sexual transmitted infections and other poor health indicators as the basis for a high-risk pregnancy that result in higher rates of loss both during pregnancy and after birth of the infant. The additional coverage for 19 and 20-year-olds, caretaker relatives and parents of children who previously may have been uninsured members of a family are also key to helping ensure children grow and thrive. We know you are carefully considering this proposal and are happy to meet with you at any time to explore what this change could mean for women and children in Michigan.

Thank you,

Amy U. Zaagman

Amy U. Zaagman
Executive Director

DCHSC 2-25-13
Mary Ablan

AREA AGENCIES ON AGING ASSOCIATION OF MICHIGAN
6105 W. ST. JOSEPH, SUITE 204, LANSING, MICHIGAN 48917

TESTIMONY OF MARY ABLAN ON THE FY 2014 MI CHOICE MEDICAID WAIVER BUDGET

MI Choice is a special Medicaid program that provides services in a person's home similar to those provided in a nursing home. Even though it's a Medicaid program, funding is capped at $282 million and that limits the number of clients that can enroll. There are 5,200 people on MI Choice waiting lists. We support the Governor's budget request for $18 million additional dollars in FY 2014 to serve people on the waiting list and move more people out of nursing homes.

Who is eligible for MI Choice?

- Low-income adults of all ages who have disabilities significant enough to qualify for nursing home care.
- People already living in nursing homes if they want to leave and are able to live safely at home.
- Income can be no greater than 300% of the SSI level ($2,130/month in 2013), and liquid assets can be no greater than $2,000.

How does MI Choice operate?

- MI Choice is a public-private partnership in which the state uses 14 Area Agencies on Aging to administer the program along with six other agencies.
- Waiver agents provide care management and contract with many local businesses and nonprofits to provide the services.

Is MI Choice cost-effective?

- MI Choice costs an average of $52/day compared with an average nursing home cost of $172/day (2010 figures).
- MI Choice transitions people on Medicaid living in nursing homes back to the community for a direct and immediate savings to the Medicaid budget. Michigan is a leader in nursing home transitions, with over 1,200 transitions accomplished in 2012.

What is the economic impact of MI Choice on local communities?

- According to a study done by Indiana University, a $10 million increase in MI Choice brings an additional $27 million in federal matching funds, creating 1,100 new jobs and returning $1.9 million in tax revenues to the state.

BOTTOM LINE: PLEASE SUPPORT THE GOVERNOR'S REQUEST FOR AN $18 MILLION INCREASE IN THE MI CHOICE MEDICAID WAIVER (LINE ITEM CALLED "MEDICAID HOME AND COMMUNITY-BASED SERVICES WAIVER")

February, 2013

(517) 886-1029, fax (517) 886-1305, www.mi-seniors.net

AREA AGENCIES ON AGING ASSOCIATION OF MICHIGAN
6105 W. ST. JOSEPH, SUITE 204, LANSING, MICHIGAN 48917

TESTIMONY OF MARY ABLAN ON THE FY 2014 BUDGET OF THE OFFICE OF SERVICES TO THE AGING (OSA)

- OSA programs are right now preventing seniors from going on Medicaid and costing the state more money. OSA services are helping very vulnerable older Michiganians, those who live alone, those with lower incomes, those with multiple health conditions, and those in danger of going on Medicaid.

- OSA services also help family caregivers who provide most elderly care at no cost to the state. It is estimated that caregivers provide 80% of the care, at an estimated annual value of $13 billion in Michigan. But when their burden is great and lasts year after year, caregivers can burn out and get sick. OSA services prevent caregivers from burning out and seniors going on Medicaid as a result.

- Research shows that frail elders with unmet needs are more likely to experience crises like falls and dehydration, resulting in hospital and nursing home stays. Some simple, low-cost services like meals, a weekly bath, and a lifeline call button can prevent the need for high cost medical and hospital services.

- Please restore the $8.9 million cut from meals-on-wheels, home care and volunteer programs between 2009 and 2011. Home-based and community services have been cut by $6.9 million and volunteer programs by $2 million. These services are preventing seniors from going on Medicaid and costing the state more. There are 3,900 seniors on waiting lists.

- OSA services are cost-effective. The average annual cost of OSA services is about $1000 per client. In contrast, a nursing home costs an average of $70,000.

- OSA services allow seniors to contribute to the cost of their services.

BOTTOM LINE: Please restore the $8.9 million in cuts to meals, community services and volunteer programs.

(517) 886-1029, fax (517) 886-1305, www.mi-seniors.net

Area Agency on Aging (IIIC)
Branch-St. Joseph

February 13, 2013

As you may remember, we shared a story about Betty Keefer last year. Betty is a participant in the Community Living Program with the Branch-St. Joseph AAA 3C. Betty is a survivor of 4 strokes and continues to be able to live in the community because of the supports through the Community Living Program and direct services from community providers funded with OSA grants. Betty continues to make gains including being able to cook for herself more independently and is able get to the store to enjoy shopping for herself via the county transportation authority. The AAA care consultants continue to assist Betty and advocate for her. They assist with tasks such as arranging doctor, dental and vision appointments and ensuring follow up on necessary paperwork. For less than $5 per day, Betty remains at home, the setting of her choice.

The success stories of individuals who are able to remain in their homes go on and on. One such story, unfortunately, just ended after five years of working with him. "John" recently passed away due to chronic health complications, but had been living independently with supports through the AAA Community Living Program. We know he would have required institutional care before we became involved. Through multiple community providers and the area agency on aging we surrounded "John" with supports like assistance with meals, home making, personal care, and medication management. This was a cost of around $7 per day... and he was happy to be at home rather than anywhere else!

We have increasingly medically complex individuals who, without the supportive services funded through OSA, would be unable to navigate, arrange and pay for necessary services that keep them successful in their home and community.

For more information, call the Area Agency on Aging at (517) 278-2538 or Toll Free at (888) 615-8009. We would be happy to talk with you about supportive services and care options in your community!

"We Need this if We Want to Save Money"

Terry Porter, age 82, lives independently in her Grand Rapids home due to services provided through the state funded Care Management program. The program pairs a Social Worker and Nurse with a client to assess their needs and determine what services are necessary. Terry says the program has been "a savior" to her as it allows her to stay in her own home.

Terry is battling lung cancer, uses oxygen and has a herniated disk in her back. Just standing while she's cooking is painful and she has to pace herself with most of her tasks. There is still plenty she is able to do, but the back pain prevents her from being able to complete certain chores around the home.

Four hours of homemaking services per week is just what she needs. The homemaker cleans and also helps with errands like picking up medication. Easter Seals staff also completed a safety assessment of her home and installed grab bars in the bathroom.

No stranger to hard work, Terry (a former legal secretary), adopted and raised four children (one who passed away) with her late ex-husband. She also went back to get her college degree in her 40's while raising two preschoolers on her own and working. She acknowledges it took her six years to get her Associates Degree, but she didn't stop there. She went on to get her Bachelors and then Master's Degree in Labor Law from Aquinas College. In her 60's she decided to tackle law school and completed two and a half years commuting to Cooley Law School in Lansing before she got sick and stopped her education.

A heart attack at age 70 prompted surgery on her carotid arteries and the encouragement to quit smoking. In 2012 she was diagnosed with lung cancer and had radiation and surgery which has required her to be on oxygen.

Her children and seven grandchildren help out when they can, but they also work during the day, which is why the homemaking service has been essential to her independence.

Terry admits it can be hard to accept help as you age, but also wants people to know the program is "not a charity, that's what you have to get through your head, because you are so proud, but the people I've dealt with have been helpful in so many ways. They are not demeaning in any way and they treat you like you are special. It's not so much we want to help you, but we're with you on this and we will do it together. I appreciate that."

Contacting the Area Agency on Aging of Western Michigan for the service has been key. Don't forget if I don't have this service, I very well might have to go to a nursing home and the cost is prohibitive. **"It's just common sense. We need this program if we [the state of Michigan] want to save money."**

Region IV Area Agency on Aging
Client name: Eugene Dobransky – Care Management OSA client since 6/14/2007
CM: Jillian Vanderbosch
AGE: 73
Race: white
Gender: male
Marital Status: married

Eugene has Multiple Sclerosis. He is a double-leg above the knee amputee on both legs due to diabetic issues. He is either in bed or up for a few hours per day in his wheelchair. He needs a Hoyer Lift to help transfer him. If he is up in his wheelchair for more than a few hours, his skin starts to break down, so he mainly stays in bed. Eugene is also suffering from MS-induced dementia, so he no longer has a PERS button because he would not know how to use it properly. Cognitively and physically, he has high needs.

His wife is his main caregiver, but she also has Rheumatoid Arthritis and back issues, so she can no longer help transfer Eugene. Jillian says he certainly meets physical qualifications for Waiver services (is on CM because he meets Level of Care) – but he is over assets, Jillian has connected the wife with Carrie to figure out what to do to be MA eligible but so far the wife has not followed through. Their son lives in town, owns a body shop, he also has MS.)

Medicare Skilled Care also serves Eugene. The nurse visits multiple times each week for catheter care. MK Skilled Home Health also provides a bath aide two days per week on Mondays and Fridays. Between MK Skilled and OSA CM, he gets care 7 days week.

CM provides about 13 hours per week of Respite care.
1.5 hours Tuesday
6 hours Wednesday – giving the wife a chance to leave the home and do errands/chores/get a little time off
1.5 hours Thursday
2 hours Saturday
2 hours Sunday
Alliance Home Health care is the agency serving this family

Doesn't get out of the house much- only for doctor's appointments, and maybe in the yard in good weather. Does go out on the back porch in appropriate weather. Maryann states it's too hard to transport him so they use CCCOA for transportation needs. Enjoys watching old movies and sports, particularly baseball (the cubs). Priest comes "every once in a while" to administer communion. Has two of the three children in the area and they visit a couple times a week. Son also has MS. Is in bed and then up in wheelchair however this is limited to 5.5 hours per day - he has a special cushion but has very fragile skin and Maryann notices skin breakdown if anything longer than that. Enjoys company of "his girls" (the paid workers through AHHC and Memorial home care). Is happy with social circumstances and denies feeling lonely.

There are ramps in the front and back of home so Eugene can go outside

Region IV Area Agency on Aging
Client name: Cory Ferguson – Waiver client since 10/6/2008
CM: Jillian Vanderbosch
AGE: 26
Race: white
Gender: male
Marital Status: never married

Cory fell out of a 3rd story window at college and has a spinal cord injury. Cognitively, he is intact. He has use of his right arm, large motor skills only, not fine motor. Cory has all kinds of adaptive equipment like a phone, a stick that allows him to write/take notes, power wheelchair, adapted van with buttons. He can even help others transfer him on a special slide board. He can feed himself, but he cannot prepare a meal.

Cory receives 3 hours per day care Monday-Friday from Cass County Council on Aging. They help get him up, dressed, meal prep, ready for the day. Saturday and Sunday his mom is employed as the SD worker to do 3 hours care. Mom and dad are divorced. Cory lives with his mom and goes to college. Once the aide have him up in the morning, he drives himself to school and attends classes at Western. Mom provides all his informal care at night once she is home.

Cory is going to school to become a psychologist. He wants to be a counselor to help other people with spinal cord injuries.

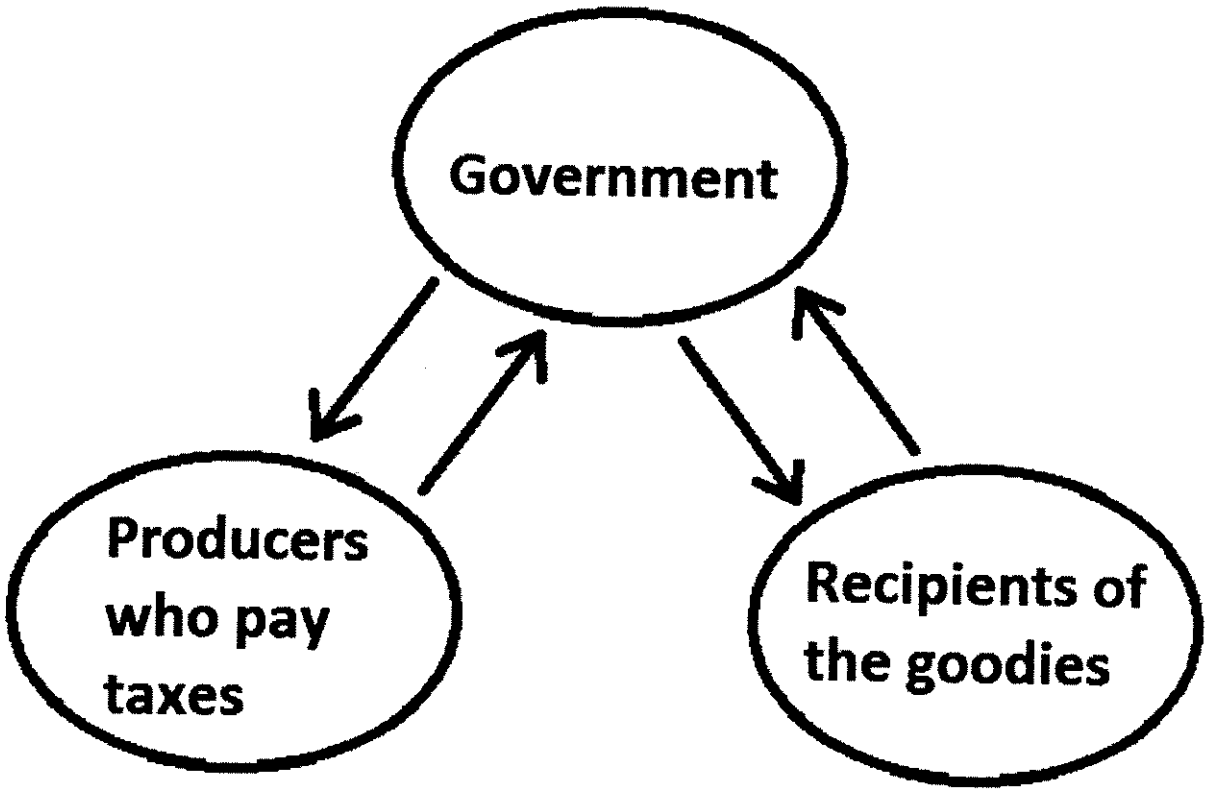
Cory's brother also visits, as does his dad. Very supportive family.
Cory is a very laid back, optimistic person.

DCH SC 2-25-13
Paul Kane

2/25/2013 Paul Kane 248-698-2822 paulkane@comcast.net White Lake Twp, MI

Testimony about the Expansion of Medicaid

- I've been selling these t-shirts for years. Over the past 2 years I've heard both Gov. Snyder and Rep. Jase Bolger use the phrase "*Re-inventing Michigan*" several times and that gives me hope, but it all depends on what "*Re-invent*" means
- I'm one of those people who is uniquely equipped to see things a certain way. At this time in history I believe that I MUST try to efficiently and clearly communicate to as many folks as I can, and out of my gratitude to all those who came before me who fought for FREEDOM, I've got to find the courage to speak here today
- I was here last Wednesday and heard some of the presentation about the plan for expanding Medicaid. I had to walk out when I heard them suggest how the expansion would be good for the economy. OMG! To think that anyone might actually believe that statement is dumbfounding. While I had been prepared with testimony last week, I knew I better tweak my plan
- So ...



- We have a president who has made it clear that he likes "*Redistribute the Wealth*"
- We all know that Medicaid is a "*Redistribute the Wealth*" scheme. Helping people is nice. However, the more that government (quote) "*helps*" then the worse our economy becomes. In other words, "*Redistribute the Wealth*" is anti-Capitalism. In my eyes it is

also anti-Freedom and anti-American. In fact, it is a core principle of the Marxist ideology, or to use a more Politically Correct phrase, how about a term from the past *"Collectivism"*, since the MOST correct term might bother some people; thus I'll use the word *"Collectivism"*

- Helping people is nice but only when someone CHOOSES to help. When they are FORCED to help then the *"Nice"* part disappears and lots of other things appear
- For capitalism to work people need capital. The idea is that people work and earn; and what they earn becomes the capital that they need to spend and invest. When that capital is taken from them BY FORCE it can eventually really piss them off
- Government has a big ole' pot of money that they FORCIBLY take from the producers
- Some people are jealous of those who have money. Some are SO jealous that they actually created the *"Collectivism"* belief system. They believe in *"Redistribute the Wealth"*
- Now when someone gives out freebies most everyone will accept them
- So again, government has this big ole' pot of money. It is astonishing what some people will do to get their hands on some of that money. When government starts handing it out, and people get used to receiving, then they want even MORE. These recipients include welfare recipients, government employees, favorable treatment of some businesses, etc
- The bigger that government grows then the more that will be FORCIBLY taken from the producers. Those producers get more and more angry and want the taking to stop. At some point the FORCED taking is viewed as LEGALIZED THEFT. But those recipients, threatened with an end to the freebies, will sometimes turn into absolute monsters
- The producers will start to go belly up, or simply give up. That is NOT good for the economy
- In fact, things could get real ugly, especially when some in government make promises that they can NOT keep, and then they fan the flames and use those promises of freebies to buy votes in order to win elections ...
- What ultimately happens? Look at Detroit. Look at Kwame Kilpatrick. And remember that Detroit really started going downhill during Coleman Young, who many believed to have had that *"Collectivism"* belief system ...

- But now about that big ole' pot of government money ...
- And now the U.S. government is dangling a big ole' carrot for states to expand Medicaid

- We also know that almost half of the money that the U.S. government now spends is borrowed. That means someone in the future must pay back that money, and that means our children. The U.S. government is spending our children's money today. And the spending is now so out of control that it's not just STEALING but maybe even child abuse
- So there's a phrase that we've all probably heard, from the Book of Moses. Now I'm not a religious fanatic but, children should not be punished for the sins of the father. Making the next generation pay for what our current government spends today is anti-Judeo-Christian, anti-God, and blatantly immoral
- But is that really why people have kids? So that they can stick them with the bill? Well actually, that is part of it, everybody has to work together. BUT, that can ONLY work in a SMALL group of people, like a family, but it can NOT work on a large scale. In a family if someone isn't pulling their weight then they get booted out of the family, and cut out of the will. But in a larger group? Especially when the government is in charge? The laybacks don't get booted out, they get rewarded, and the producers who are paying the bills get more and more resentful
- This IS the definition of "*Collectivism.*" It doesn't work. Look around the world. It is failing everywhere because the producers go belly up or simply give up

- We know that one of the REAL big problems is that a bunch of us are getting close to retirement age. And there's no money left to pay all those pensions, including medical costs which are always much higher for the elderly
- We have people like me who were downsized out of the company in order for the

UNFUNDED PENSIONS and MEDICAL BENEFITS

company to get out of paying my elderly expenses, and even though I always had company provided insurance, I rarely used it; but now what?

- Then you have all those government employees, where one government guy promised another government guy not to worry because we'll force that guy over there to pay them both for the rest of their lives. And though someone was supposed to be putting money aside, in many cases it was raided by someone and so there's no money there
- Then how about unions like say the UAW. Why was GM really going broke? I read last week that GM has 96,000 active employees and one Million retirees. There is no way that 96,000 can support the company, themselves and one Million retirees. So what did Obama do? He took GM and gave half of it to the union so that maybe they could protect their pensions? But still today, taxpayers prop up GM
- Then there's Social Security and the Social Security LOCKBOX. Yah, right. That money's gone, too
- Then there are the Insurance companies who can't stay in business if they pay out more than they take in. Fact is, insurance companies are just "*Collectivism*" turned into a business; and the only way they can work is by keeping the "*expensive*" or the "*undesirables*" out, like those with pre-existing conditions...
- But "*Collectivism*" doesn't work and it's always somebody else's fault for why it doesn't. The example I use most often for proving that it's somebody else's fault is NAZI Gemany. The "*Z*" in NAZI stood for "*Socialist*," the National Socialist Party of Germany; NAZI. But THEIR "*Socialism*" wasn't working, either. Why? It must be because of the Jews! Kill 'em. Or it's because of the gays! Kill 'em all! But that did NOT fix anything, did it? Because "*Collectivism*" doesn't work and it turns people into monsters

- Blaming other people, like *"those millionaires and billionaires;"* sound familiar?
- So why was it so important to pass Obamacare? Because that freight train's a-coming with all those retirees onboard, and there's no money left to pay all those retirees. Without big changes those promises canNOT be kept, all those *"Collectivism"* schemes didn't work, but what solution did the Democrats in D.C. come up with? MORE *"Collectivism."* MORE *"Punish the Producers."* MORE *"Steal from the Kids?"*

- I don't envy any of you your jobs. But as a big reader, I'd really like to recommend a new book that came out two weeks back: *The Last Line of Defense* by Ken Cuccinelli, the Attorney General for Virginia. It's an inside look at so many lawsuits against the Obama administration, especially Obamacare. He discusses history, looks at our *U.S. Constitution*, what our Founding Fathers thought, etc. It might help you all with this issue. He makes some good points
- I'd also like to remind you that the word *"Democracy"* is nowhere to be found in either of America's founding documents, but that it is insisted upon in the *Communist Manifesto.* Reading THAT book will help you recognize *"Collectivism"* when you see it; and when anyone claims that we live in a *"Democracy"* my warning bells go off; *"... and to the Republic for which it stands ..."*
- I think we Michiganders CAN fix our problems, but expanding Medicaid and implementing Obamacare and *"Stealing MORE from the Kids"* are NOT the answer
- No doubt insurance companies are big campaign contributors. However, perhaps their *"Collectivism"* business isn't the only answer, either, but that's a different discussion

- We can re-invent Michigan, but how will we do it? America and Michigan did NOT become great because of *"Collectivism"* on a grand scale, quite the opposite, with SMALL groups and families working together, and people being allowed to keep most of what they earned, to keep their *"Capital,"* and by NOT being endlessly regulated, either
- Something else that I've learned that really helps me understand many things that happen in our world of politics? ... that is that one of our political parties SEEK SOLUTIONS to problems while the other party is always PUSHING AGENDAS, and never the two shall meet. So when somebody rants *"Just Compromise"* never forget that that is most likely NOT possible and they're simply trying to throw you off your game
- Let's make Michigan better, not worse. Let's attract and reward producers and our younger adults, not chase them away. Our demographics are getting older. And as for those who want something for nothing? Guess they'll need to start pulling their own weight, and change their lifestyles if need be ...

DCHSC 2-25-13
~~Did Not Speak~~
Michael Moore
Erica Fitz

Team Mental Health Services

The Uninsured in Michigan and Detroit

The city of Detroit has the highest adult uninsured regional rate in the State of Michigan at approximately 18%. More than a quarter of the uninsured population lives below 100% of the poverty level; 63% live below 200% of poverty and 85% of the uninsured population live 300% below poverty. These are the majority of consumers/members who will be served by the Team Mental Health Services Primary Care/Urgent Care Clinic, scheduled to open its doors in April 2013.

Team Mental Health Services logged over 400,000 visits/encounters in 2011, and served over 4,500 unduplicated consumers/members of, whom were uninsured on their first visit. These statistics reflect mental health services alone.

Team Mental Health Services Primary Care/Urgent Care clinic will provide comprehensive, integrated care in an environment that is welcoming and designed to meet the needs of its consumers/members, regardless of insurance status or ability to pay. Consumers/members who are uninsured will be assisted by a TMHS team member to complete an application for Medicaid, Medicare, or other entitlements, including housing assistance.

Team Mental Health Services Primary/Urgent Care clinic will provide comprehensive integrated care including:

- "Same day" and "walk-in" medical services
- "Low cost" or "no cost" medical services
- Transportation vouchers and services to and from appointments
- Home-based services
- Services aligned with local and community hospitals
- Evening and weekend clinic hours
- Indigent pharmacy and medication assistance
- Dental care
- Vision care

Administration
921 Howard Street
Dearborn, MI 48124
(313) 274-3700
(313) 274-4900 fax

Eastern Market Clinic
2939 Russell
Detroit MI 48207
(313) 396-5300
(313) 396-5353 fax

Southgate Clinic
14799Dix-Toledo Rd.
Southgate, MI 48195
(734) 324-8326
(734) 324-8327 fax

Unlike other agencies, Team Mental Health Services Primary Care/Urgent Care clinic will allow the consumer/member to receive follow up care on the same day. Laboratory services can be performed immediately after a physician appointment and physical health checks can be completed in conjunction with the consumer/members' Behavioral Health Clinical Team present

Services will be provided by a team of Medical Staff, including:

- Board Eligible and Certified Psychiatrists
- Nurse Practitioners
- Family Practice Physicians
- Registered Nurses
- Medical Assistants
- Physical Therapists
- Occupational Therapists
- Speech Therapists

Why is this important?

Undetected health conditions that may have been managed worsen and become dangerous, resulting in premature death by an average of 25 years among the mentally ill.

Twenty-six percent of Detroiters live below the poverty level (compared to 12.4% nationwide) and 87.7% of Detroit residents are minority. Detroit residents have limited access to primary health care, making them more vulnerable to dangerous conditions. The shortage of primary care doctors in much of Detroit has led the Federal Health Resources Service Administration, Bureau of Primary Care to designate more than half of the Cities of Detroit, Hamtramck and Highland Park as medically underserved areas. Low-income Detroiter are more likely to enter the health care system at a more advanced stage of disease, resulting in more complications, a higher level of service needed, and a higher mortality rate than exists for those who seek care regularly or when a need arises.

According to the American Heart Association, hypertension is more common among African Americans than among any other ethnic group in the world. Nearly 40% of African Americans have hypertension, acquire the disease at a younger age, and suffer more of its complications.

The cardiovascular health of Detroiters is much worse than residents of other cities across the nation, and four times more Detroiters die of cardiovascular disease (CVD). In the tri-county area, Wayne County has the highest CVD death rate (306.9 per 100,000) compared to Macomb (275.7) and Oakland (208.7).

According to Detroit's "Community Health Improvement Plan 2001-2005", the rates for Type 2 diabetes for African Americans in Detroit far exceed state and national rates. African Americans are nearly twice as likely to have diabetes as Whites. They also experience higher rates of complications associated with diabetes such as blindness, amputation, and kidney failure.

About Team Mental Health Services

Since 2002, Team Mental Health Services (TMHS) has provided exceptional services and care to adult Members with severe and chronic mental illness in Southeast Michigan. TMHS has two clinics, located in Detroit and Southgate, serving over 4,750 unique Members each year. TMHS has been CARF (Commission on Accreditation of Rehabilitation Facilities) accredited since 2003 and serves as a Michigan Department of Community Health (MDCH) provider.

TMHS' mission is to enhance the lives of others by providing services in an environment that promotes quality of life, continuous improvement, and social awareness in a manner that complements the goals and needs of the consumer.

TMHS' treatments are founded on evidence-based practices and research in the area of mental health and are administered by a comprehensive staff of psychiatrists, therapists, nurses and case managers. Treatments include Cognitive Behavior Therapy; Solution-Focused Brief Therapy; Group Therapy; Family Therapy; Crisis Intervention/Stabilization, Co-Occurring Treatment and Primary Health Care.

Members also benefit from a broad range of programs designed to promote community integration, enhanced independence and quality of life including Skill Building, Peer Support, Pathways to Employment and the Permanent Supportive Housing Program.

The Team Mental Health Services Primary Care/Urgent Care Clinic will be located directly adjacent to its Eastern Market Clinic located at 2939 Russell Street, Detroit, 48207.

Administration
921 Howard Street
Dearborn, MI 48124
(313) 274-3700
(313) 274-4900 fax

Eastern Market Clinic
2939 Russell
Detroit MI 48207
(313) 396-5300
(313) 396-5353 fax

Southgate Clinic
14799Dix-Toledo Rd.
Southgate, MI 48195
(734) 324-8326
(734) 324-8327 fax

For more information, contact:

Michael Moore
Team Mental Health Services, Director of Public Relations
nmoore@team-mentalhealth.com
921 Howard Street
Dearborn, MI 48124
Ph: (313) 274-3700 ext. 116

Excellence In Enhancing Independence

TMHS offers individualized mental health and substance abuse services to adults with illnesses including, schizophrenia, bipolar disorder, and severe depression. Treatment teams of psychiatrists, social workers, case managers, peer advocates, and nurses collaborate with consumers to deliver strength based services. Our team partners with consumers, family and the community to create opportunities for wellness and recovery while reducing the impact and stigma of mental illness.

US Surgeon General

Administrative Offices

921 Howard
Dearborn, MI 48124
P (313)274-3700
F (313)274-4900

Eastern Market

2925 Russell St
Detroit, MI 48207
P (313)396-5300
F (313)396-5353
TTY(313) 396-4270
Crisis Line. (313) 258-3842

Pathway's to Supportive Employment (SEP)

2939 Russell St.
Detroit, MI 48207
P (313) 396-5300
F (313) 396-5353
TTY (313) 396-4270
Crisis Line. (313) 258-4758

Southgate

14799 Dix-Toledo
Southgate MI 48195
P(734) 324-8326
F/TTY(734) 324-8327
Crisis Line (313)258-4758

You

Excellence In Enhancing Independence

While approximately 80 percent of all people in the United States with a mental disorder eventually receive some form of treatment, on the average persons do not access care until nearly a decade following the development of their illness, and less than one-third of people who seek help receive minimally adequate care.

Accessible, Available and Accountable.

Team Mental Health Services

Excellence In Enhancing Independence

Mission:

Enhance the lives of others by providing services in an environment that promotes quality of life, continuous improvement, and social awareness; in a manner that compliments the goals and needs of the consumer.

Goals / Vision

It is our goal to be the premier provider of mental health services. This will be accomplished by improving and maintaining audit and service scores while pursuing the link between computer technology and service accountability.

Team Mental Health Services

Excellence In Enhancing Independence

Services

Case Management Program

Assessing, planning, linking, advocating, conducting, and monitoring to assure needed services are provided.

Co-Occuring Program

Substance Abuse Services addressed, along with mental health, in a welcoming environment.

Housing Program

Providing long-term housing, with necessary supportive services, to help learn or re-learn life & social skills necessary to maintain independence.

team-mentalhealth.com

Outpatient Program

A recovery approach to treatment and diagnosis of mental health disorder.

Pathway's Supportive Employment Program

Works with adults with severe and persistent mental illness, to assist them to obtain and maintain employment of their choice.

Peer Support

Services provided by peers to support, mentor, and assist consumers to achieve community inclusion, recovery and productivity.

Primary Care

Medical Services provided to consumers who are vulnerable to health risks.

Skill Building Program

Opportunity for consumers to build on independent living skills in a fun and enriching environment.

Team Town

A 24 hour 7 day a week one stop shop designed to address all consumer needs.

Volunteer Program

Providing an opportunity for individuals to give time and skills to the consumers, we care for, as well as an opportunities for students to gain valuable experiences.

Team Mental Health Services

Volume 1/Issue 1 ~January 2013

GIVE THEM SOMETHING TO TALK ABOUT!
TMHS NEWSLETTER

INSIDE THIS ISSUE:

Special points of interest:

- Words from TMHS President, Pamela Lamb .
- Pathways has a pleasant announcement!
- Meet our CFO.
- 2012 TMHS Holiday Celebration Las Vegas style!
- 2013 Second Annual TMHS Bocce Ball Tournament.

EMAIL SUGGESTIONS

Please email any suggestions you may have to plamb@team-mentalhealth.com

WORDS FROM TMHS PRESIDENT

Happy New Year!!!

I'm very excited to welcome in 2013 and all the great things we have planned. As a brief recap, In 2012 TMHS established a presence in the region as an elite provider of mental health services. Our innovative approach to holistic/integrative care for our members yielded results that have not been seen in the human service sector. That accomplishment is attributed to the commitment to excellence that you as a member of the Team family have fostered. As an organization we have raised the bar in treatment delivery, quality assurance and customer service. As stewards of Team you have made this happen with your consistent scores in the 95% percent range and higher. This I know is no small undertaking and I appreciate your hard and dutiful work to make this happen. Because of your efforts, we are able to open and walk through doors that may have otherwise been difficult or closed to us.

In addition, because of the hard work put forth by each of you, we continue to grow our membership. The result of which required us to embark on remodeling our Southgate clinic, pursue expanding the physical layout and infrastructure at Eastern Market II; and the growth and expansion of our Pathways program, which saw the opening of Team Town was but the icing on the cake.

Also in 2012 as we foresaw the advent of the Affordable Care Act, our administrative and executive team convened in late 2012 on a one day retreat to establish our strategy to comply with and maximize the provision of the Act. Out of this retreat we established a strong understanding and foundation to address the AFA mandates; as well as positioning ourselves for 2014 and 2015. In addition we laid the ground work to our 2013-15 strategic plans which will lead and govern us through 2015.

In 2012 we committed ourselves to building and creating partnerships and strengthening our partnerships. We will continue developing this for 2013.

In 2013, we will continue building our relationship with Advance Care Pharmacy, Detroit Rescue Mission Ministries, Fidelis Insurance Company, the substance abuse treatment provider network, and most certainly our funding stakeholders such as Gateway, Consumer Link, Carelink, Synergy, and others. In 2013 we will look to expand our funding streams through aggressive marketing and public relation efforts. We hope to develop fiduciary relationships with the regions HMO's. In 2013 we will strengthen our community outreach efforts to the psychiatric hospitals and primary care providers.

In 2013 we have plans for expansion of the services we provide to individuals with developmental disabilities and increasing the quality of our skill building/vocational program. In 2013 we will upgrade our technical proficiencies to merge our electronic capabilities to accommodate our business and clinical practices.

With all the positives being said our vision will not be realized without all staff joining together and with plenty of hard work. We have the best CMH in the country that will make a difference in our members' lives.

I will leave you with a quote from the late Susan Jeffers: "Knowing that we can make a difference in this world is a great motivator. How can we know this and not be involved?"

- Susan Jeffers

Pamela Lamb, President/COO

HEALTH INTEGRATION

By Ken Longton, RN

What is Health Integration? Much has been spoken about in the last 12 months regarding health integration. Questions such as, how does it affect what we do at Team Mental Health Services? How will it affect me as a clinician, nurse, care coordinator, customer service professional, etc.?

Well according to Substance Abuse Mental Health Service Administration (SAMHSA), Integrative Care essentially is: "Essentially, the development of integrated primary and behavioral health services designed to better address the needs of individuals with mental health and substance use conditions, whether seen in specialty behavioral health or primary care provider settings."

Also according to SAMHSA, people with mental and substance abuse disorders may die decades earlier than the average person — mostly from untreated and preventable chronic illnesses like hypertension, diabetes, obesity, and cardiovascular disease that are aggravated by poor health habits such as inadequate physical activity, poor nutrition, smoking, and substance abuse. Barriers to primary care — coupled with challenges in navigating complex healthcare systems — have been a major obstacle to care.

At the same time, primary care settings have become the gateway to the behavioral health system, and primary care providers need support and resources to screen and treat individuals with behavioral and general healthcare needs.

The solution lies in integrated care, the systematic coordination of general and behavioral healthcare. Integrating mental health, substance abuse, and primary care services produces the best outcomes and proves the most effective approach to caring for people with multiple healthcare needs. (SAMHSA website, 2013)

Essentially, care awareness and treatment of physical and behavioral health are dependent upon one another.

For example, when a person is depressed, there is a tendency to not take care of them in daily life. Activity and exercise diminish, eating routines are disrupted or non-existent and self-care/Activities of Daily Living such as bathing and grooming do not get accomplished. This builds upon itself and grows to not interacting with others or missing school and work and person can devalue themselves as being lost and hopeless. Physical health is directly affected by daily self-care. Lack of activity and good nutrition has a direct impact on physical fitness (weight and BMI), blood sugar (as with Diabetes) and blood pressure (Hypertension). Inadequate self-care leads to sores, infections and hospitalizations. When physical health deficits are not identified and treated, behavioral problems are exacerbated.

It is easy to see from the example above, how the mind and body must work together as a unit. TMHS is moving forward to offer increasing services for physical health with the goal and vision to provide a full complement of physical and behavioral health services to our members. This is how:

- Vital Signs are being offered to all members when they arrive at the clinics. This can include: Temperature (early identification of infection); Blood Pressure (screen for hypertension); Pulse (heart function); Respirations (breathing difficulties); Pulse Oximetry as indicated (measure oxygen in the bloodstream); Blood Sugar (as indicated-screen for Diabetes); Weight and BMI (screen for obesity). We will be adding Cholesterol screening also.
- When concerns are identified with the vital signs, the member is referred to the Registered Nurse for follow up.
- Vital Signs will soon be electronically entered into CTS for tracking and Trending for our members.
- Recruiting and hiring physical medicine providers. Currently, Eastern Market has Primary Care provides on Tuesdays, Thursdays and Fridays. Southgate has Primary Care Providers on Wednesdays, some Thursdays and two Saturdays a month. We will grow to offer Primary care services on every business day we are open!!
- Our registered nurses will develop health care objectives, which will be included in the IPOS; with direct follow-up by nursing staff.
- Recruiting Dental Services.
- Pursue and develop women's health services provider programs .
- Develop and schedule services for X-Ray and Ultrasound at our clinics.
- Expand Occupational Therapy and Speech and Language Therapy services.
- Recruit and retain Physical Therapy services.

2013 will prove to be a very busy, active and growing time for Team. Our services are expanding to where we can serve the "whole person".

As the result of these initiatives, TMHS is positioned to be the premier health integration provider in the region and the country. This is an exciting time for all of us. If you have other questions on the wave of health integrations future, please feel free to contact me.

TMHS is pleased to announce our new Chief Financial Officer—Matthew Rackley

"I am very honored and excited to be joining Team. Team Mental Health Services is one of the best CMHs in the County on its way to being the best in the Country, and I am looking forward to doing my part to help us continue this unbelievable rate of growth. Their innovative clinical approach to integrated care will change the way people look at mental health and I a confident that I can use my experience and expertise to help take the company to the next level!"

Matt

SUPPORTIVE EMPLOYMENT PROGRAMS UPDATE

Pathways

Security Vocational Program added to impressive list of vocational programs offered at Pathways.

The Security Vocational program is a 6 week long training that will be facilitated by Mr. Quinn Lawrence. Mr. Lawrence will bring his experience as a Police officer to develop the curriculum and training needs for all participants. Other Pathways program offerings:

- Peer Support Specialist
- Janitorial
- Landscaping
- Food Handlers
- IT-Starting soon
- Data Entry-Starting soon
- Direct Care-Starting soon

Other announcements from Pathways...

Job Club

Self-esteem is the focus behind this support service program. The purpose of the job club is to continue engaging our members with positive messaging as they seek employment opportunities. In addition to assisting them in becoming self-actualize, the job club will provide additional guidance and training in mock interviewing, proper dress etiquette, effective job searching strategies, resume preparation, and how to reframe negative responses into positive outcomes. **All members can be referred to the Job Club.**

Women's Shoe donation

Pathways/Main Street received an **ENORMOUS** shoe donation from Forever Shoes of Northland Mall. A total of 576 pairs of lovely women's shoes were donated.

For additional information regarding the above programs or announcements, you may contact:

Trudy Williams, Pathway's Program Director

Give Them Something To Talk About!

IT UPDATES

Electronic Medical Records comes to Team in 2013

Team Mental Health Services (TMHS) is excited to announce the roll out of our Electronic Medical Record (EMR) system in the spring of 2013. This state of the art technology will support all of our current electronic platforms necessary to manage our clinical and fiduciary business practices.

This best practice technology will be installed and managed by PCE Systems (PCE). PCE was established in 1990 and specializes in the design, implementation, and hosting of custom information systems. As a full service customer information solutions provider, they have developed and maintained many mission-critical systems for a wide range of clients. Over 30 Community Mental Health customers are current customers, in addition to customers who include Ford Motor Company, American Axle and Manufacturing, Trinity Health Systems, and UAW-Ford National Programs Center and McLaren Healthcare.

PCE Systems was selected because of its unique position of having programmed D-WCCMHA's MH-WIN system. In addition, fiduciaries for TMHS such as Synergy, Care Link, Consumer Link, Gateway, and CLS are also clients of PCE systems. Thus, we anticipate a seamless transition based on these shared relationships.

In January of 2013 PCE system provided an onsite demonstration for our president, Pamela Lamb and key TMHS staff. The demonstration allowed for questions and answers to gage the systems complete capability and compatibility with our unique service delivery system. Our president and staff that were present were pleased with the robust, yet user friendly capabilities of the system.

TMHS CALL CENTER

Hello Everyone,

We are embarking on a new journey at Team Mental Health Services. In the next couple of weeks we will be launch the **TMHS-Call Center**. The creation of our call center will position us in the market as a best practice provider in the area of health integration.

The principle benefits and efficiencies we will see from our Call Center are:

1. **Centralization**- All TMHS calls we will be triaged from a single access point.
2. **Appointments**- Will be scheduled for both locations by the Call Center staff allowing for proficient and efficient customer service for our members.
3. **Procedure**-Staff will receive an email and/or text messaged that will denote high priority messages.
4. **Process**-Crisis calls will be routed to clinical staff promptly for efficient and effective triaging to assess members behavioral and physical issues.
5. **Customer Service**-Members will be greeted with a live voice for every call placed rather than an automated system
6. **Communication**-Cell phone numbers, extensions, email addresses, emergency information, resources, doctor/nurse information, etc. will be easily accessible for Call Center staff to improve communication between clinical staff as needed.
7. **System Integration**-Incoming calls can be transferred to cell phones for better accessibility.
8. **Convenience**- 24 hour accessibility for our members.

Please be on the look-out for the launch date of the Team Mental Health Services-Call Center. We are currently in the hiring and training process to make this an efficient transition. I hope everyone is as excited as I am!!

Shawn Siddall
Director of Clinical Support

Health Alert

FLU INFLUENZA

Influenza is a potentially severe acute respiratory illness caused by various strains of the influenza virus. The different strains all produce characteristic symptoms, and because major outbreaks are associated with increased mortality, occurrences can be identified in history. Outbreaks consistent with influenza can be traced back at least to the court of Elizabeth I. Some have speculated that the Plague of Athens described by Thucydides was influenza complicated by bacterial superinfection. The influenza syndrome, commonly known as the flu, with its fever, cough, rapid onset and body aches, is not only typical enough to be recognized in the past, but it also allows physicians to recognize it, especially when it is known that the virus is circulating. Unfortunately, death is the other consistent phenomena associated with influenza. Mortality statistics are the principal way the intensity of an influenza outbreak is quantified, and are so characteristic that viral identification of etiology is not required.

THE VIRUS AND ITS ANTIGENS

The influenza viruses contain RNA (ribonucleic acid) and are somewhat unusual in that they have a segmented genome, which means that there are eight distinct segments to the single-stranded RNA. Influenza types A and B are the only strains with epidemic potential; type C viruses are difficult to work with in the laboratory and are one of the multiple agents able to cause the common cold. While the viruses are classified into type A and B on the basis of their internal components, it is the surface antigens that are important in eliciting antibodies that will protect against future infection. These surface antigens and their changes make influenza challenging to control. Two types of changes are recognized.

One change occurs in both type A and B viruses and is a result of point mutations in the segments of the genome coding for two specific surface antigens (the neuraminidase [N] and the hemagglutinin [H] segments). These mutations are the reason that both type A and B viruses change regularly from year to year, though type A changes somewhat more rapidly than type B. Such changes are referred to as "antigen drift." Another change is more dramatic, only occurring with type A viruses, and is an example of "antigen shift." It takes place when one or two gene segments are replaced in a circulating virus. The same two antigens, or proteins, are involved in both types of change. The various influenza A viruses are categorized into subtypes by the differences in those two antigens, such as A (H_1N_1) or A (H_3N_2).

The most widely accepted theory explaining this antigen shift is that the segments come from animal influenza viruses. Type B influenza is confined to humans, while type A exists in numerous species of birds and domestic animals. There are fifteen types of hemagglutinin in the influenza virus of birds, but only three in human viruses, which gives an ample opportunity for the segment coding for the hemagglutinin to move from avian viruses to human. This has apparently happened in the past, and is likely to occur in the future, either directly or through pigs. In 1997, in Hong Kong, an avian virus infected humans directly, but did not become adapted to humans by exchange of gene segments. If it had, a pandemic undoubtedly would have resulted.

Ten Things You Can Do to Be Recovery Oriented, Starting Today ~ by Larry Davidson, Ph.D.

For practitioners to fully embrace recovery, many changes are needed that require significant policy, program, and systems reform, which is why SAMHSA and other organizations are calling for a transformation of behavioral health care.

However, the need for large-scale reform doesn't mean behavioral health care providers cannot make important changes in their everyday practice while waiting for broader reform to take place. You'll be surprised how small changes can make a big difference. Try these 10 steps with the people for whom you provide care.

1. Ask them how they would like to be referred to (first name, last name, nickname, etc.). Refer to them as people, not as diagnoses or disorders. Although doing so may initially seem unnecessary or awkward (e.g., referring to someone as "a woman with schizophrenia" or "a man with an opiate addiction"), talking—and even more important, thinking—about people as "schizophrenics" or "addicts" is disrespectful and not in line with recovery-oriented practice.

2. Ask if there is anything you can do to help them feel more comfortable during your time together.

3. Encourage them to ask questions about the care you or others are providing. To facilitate this question-and-answer exchange, inform them of your treatment plans before taking action (e.g., "Now I'm going to ask you a few questions about ..." or "I need to get some information from you so I can ..." or "I'd like to set up our next appointment, but first I want to see if you ..."). This will allow them to prepare and pose questions at an appropriate time.

4. Enhance your service setting so it is dignified and conveys hope and compassion. Decorate the space with art and furniture and play music (if appropriate) that is appealing and culturally meaningful to the people for whom you provide care. Within the limits of your available resources, make the space one you also enjoy coming to every day. Pay particular attention to waiting areas and restrooms.

5. Eliminate artificial and unnecessary rules. These rules have typically been in place for a long time, whether for staff convenience (e.g., "towel hours" in inpatient units) or as a result of stigma. If rules are necessary, involve your patients in their development and communicate the reasons why they are needed to staff and patients.

6. Do not make rules to control patients' behavior. These restrictions, which are often based on negative stereotypes about people with behavioral health conditions, can result in discriminatory practices that impede recovery. Examples include using "privilege" systems in inpatient units or residential programs, making access to resources contingent on treatment adherence (e.g., "I won't refer you to supported employment until you take your meds for three months"), and attempting to control what people who are receiving care can and cannot do outside of treatment (e.g., "there can be no contact between group members outside of the group").

7. Be mindful that the majority of people with behavioral health conditions have a history of trauma. Therefore, when conducting intake interviews, exploring psychosocial histories, and developing care plans, remember to ask people what helps them get through difficult times (e.g., spirituality), what would help them feel safe in your care, and whether or not they feel comfortable discussing their sexuality with you, as all three issues are pervasive human concerns that have been relatively neglected by behavioral health practitioners in the past.

8. Ask them if they know anyone who has recovered from or is in recovery from a behavioral health condition. If they don't, offer to introduce them to people who have (or provide DVDs with relevant recovery narratives).

9. When conducting team rounds, case conferences, or discussions about patient care in which the individual receiving care cannot participate, have at least one person assume the role of the patient/client. Ask that person to try his or her best to represent the patient/client perspective in the discussion. This strategy was first suggested more than a decade ago by Ken Thompson, M.D., when he asked staff to refer to a patient/client they wanted to discuss by using the first name of a staff person in the room. So instead of discussing the case of Mr. or Ms. X, they would discuss Ken's situation, and the care they were offering him. If this is not feasible, use your imagination to put yourself or a loved one in the person's place and consider the discussion from his or her point of view. For example, ask yourself: "What would I want from this group if I was in the patient's/client's situation?" or "How would I feel about this discussion if we were talking about my son, daughter, spouse, or sibling?" If you already practice these nine things, try this final suggestion:

10. Ask the people for whom you provide care and their loved ones what you can do to better help them, or how you can improve the quality of your care. They will undoubtedly have ideas.

UPCOMING EVENT

Team Mental Health Services

February 21st 2013
For
Second Annual Bocce Ball Tournament
1:00 PM ~ 5:00PM

For Details Contact: **Michael Moore**

Phone: (313) 354-4788

Email: mmoore@team-mentalhealth.com

Or visit: www.team-mentalhealth.com/bocce

Name: _____ Phone #: _____

Email: _____

Company Name: _____

Address: _____

Pkg. # : _____ Quantity: _____ Total Enclosed: _____

Name of Participants _____

All proceeds are going to benefit TMHS programs and facilities.

Please make checks payable to:
Team Mental Health Services
921 Howard Street
Dearborn, MI 48124

REGISTRATION INFORMATION	
PKG. 1, INDIVIDUAL	$85
PKG. 2, TEAM OF FOUR (4)	$300
PKG. 3, COURT SPONSOR	$100
PKG. 4, INDIVIDUAL W/SPONSOR	$185
PKG. 5, TEAM W/SPONSOR	$400
PKG. 6, BRONZE SPONSOR	$500
PKG. 7, SILVER SPONSOR	$1000
PKG. 8, GOLD SPONSOR	$2000

THINGS TO CELEBRATE

Abbie is having a boy! TMHS will welcome a new addition in February

CONGRATULATIONS!

Congratulations to all of our Pathways 2nd Graduation Class!

Kellis Ala	Antonio Harris	Roxanne Thomas
LaRonica Brook	Michella Brown	Barrier Tolliver
Linda Chisolm	Frank Coleman	Anthony Wiggins
Jafre' Deloatch	Lotya Dorsey	Harris Works
Sandra Foster	William Foster	
Leandra Gibson	Shonte Gibson	
Jessie Harris	Sedrick Hunter	
Rosemary JaKubus	Thelma McCaskill	

Stay Connected

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www.facebook.com/TeamMentalHealthServices

DCH SC 2-25-13
Gilda Jacobs

MICHIGAN LEAGUE FOR PUBLIC POLICY

Testimony Before the House Appropriations Subcommittee on Community Health

Gilda Z. Jacobs, President & CEO

February 20, 2013

As you make decisions on the DCH budget, I encourage you to keep in mind that your decisions directly impact people's lives and are not just numbers on a spreadsheet. Because of its importance, I'm going to limit my comments to the Medicaid expansion.

The expansion of the Medicaid program, as recommended in Gov. Snyder's budget, will be one of the most important decisions you will ever make as a lawmaker. You will decide if hundreds of thousands of low-income working adults and parents will gain access to health care coverage and health care security for themselves and their families, or whether they will be forced to remain uninsured because they cannot afford to buy healthcare coverage.

As you know, the governor studied this issue very carefully before making his recommendation and he concluded it is the right thing to do for the state and its residents. The Medicaid expansion has the potential to do more good than any other policy proposal over the last 40 years. Providing comprehensive healthcare coverage to more than 300,000 of your constituents will be a great achievement, and this can be done while saving state funds, bringing more federal funds to the state, and reducing health care costs for all of us—a new "triple aim"!

Concern has been expressed by some about this expansion; let's address the concerns rather than deny the coverage.

Concern has been raised that the federal government will renege on the enhanced funding. The federal government has a long history of increasing or enhancing federal Medicaid funds, not reducing them; health care is too important. There is also an opt-out for the state in the unlikely event that it would become necessary. As you know, the governor has charted this program through 2035 to ensure its viability.

Concern has been raised about provider capacity. That is a legitimate concern but it applies to all of us with the projected physician shortages. We need to find solutions not deny coverage. The governor has suggested one solution with the better use of the skills and abilities of health care professionals to reduce the impact of the projected physician shortage.

In addition, the newly eligible population would be enrolled in managed care plans, which have expressed interest and capacity to handle the newly eligible population. This would also extend comprehensive mental health services to a large population in our state, enhancing our overall quality of life and safety.

Let's set politics aside and work together to make the expansion work for Michigan—those newly qualifying, the currently insured, providers and businesses.

Thank you.

DCH SC 2-26-13 (Did Not Speak)

David Benjamin, RN, MSN
(810) 247-0371

Michigan Home and Community Services Network

Home and Community Services Waiver Program

My name is David Benjamin and I am the Vice President of the Michigan Home and Community Services Network, a Private, Non-Profit Agency that promotes and advocates for those in need of Community-Based Services, their families and providers. We are supported by many consumers as well as the Independent Private Sector MI Choice Waiver Agents throughout the State of Michigan. Waiver Agents provide services to a population of "Nursing Home Eligible" Elderly and Disabled program participants who **choose** to reside in the community with needed supports.

These Waiver Agents provide services to a population of "Nursing Home eligible" elderly and disabled program participants who choose and seek to reside in the community.

The MI Choice Waiver Program provides a cost savings to the State of Michigan; this program helps people avoid Nursing Home Placement. The MI Choice Program also helps current Nursing Facility Residents move back into the community through the "Nursing Facility Transition Initiative." During the current fiscal year the MI Choice Program will save the taxpayers of Michigan $110.00 per day for each successful nursing facility transition that is performed. Based on the current level of Statewide Nursing Facility Transition Activity; when **1500 people move back into the community the State of Michigan can expect a savings in excess of $45 million dollars to the Long Term Care Line of the Budget.**

Our work is not yet done. There are more people who we want to help. We implore the Legislature to continue to support the efforts of Waiver Agents and the Centers for Independent Living with the implementation of the Nursing Facility Transition Initiative. We would ask that the budget for the MI Choice Waiver Program be increased to support the ability of **2000** people to move back into the community in the coming fiscal year through the efforts of the Nursing Facility Transition Program.

In closing, I would like to thank you for the support that the Governor and the Legislature has provided in the past to the Waiver Agents and Centers for Independent Living Agencies who both work very hard to continue to offer people a **choice** in where they will live. We strive to allow people in need the opportunity to live as independently as possible in the community. I would urge the Legislature to continue to support the MI Choice Program and to expand the opportunity for greater Cost Savings to the State of Michigan Taxpayers in the coming fiscal year.

Thank you for allowing me to testify today....

DCHJC 2-25-15
D.d not speak

LeadingAge™ Michigan

Testimony to the House Appropriations Subcommittee on the Department of Community Health

Chairman Lori and members of the subcommittee, thank you for the opportunity to testify on the Governor's Budget Recommendation. My name is Dave Herbel and I'm the President and CEO of ***LeadingAge Michigan***.

LeadingAge Michigan represents over 230 not-for-profit and mission-based aging service providers who provide the full array of services that seniors need. Many of our members have been in service for over a century. We appreciate the Governor's goals to bring quality, cost effectiveness, and accountability to the health care system as well as the Michigan taxpayer.

We believe that there are powerful opportunities to create a better system that is more closely aligned with consumer preferences, needs, and desired outcomes. We also believe that any re-design should include preservation of only those programs that best serve the interest of the consumer. ***LeadingAge Michigan*** supports the development of an integrated care model to the degree that it provides an effectively coordinated effort to address the complex needs of the frail senior in a timely manner.

With the significant decreases in the nursing home utilization (15%) over the past two years, we believe this is an opportune time to reinvest savings and improve access to more cost effective programs that serve seniors where they want to live. We also need to support the ability of high performing nursing homes to serve Michigan consumers. There are four important avenues that will help accomplish this:

- Hold harmless the current Nursing Home reimbursement methodology and related policies for a period of two years. During these times of uncertainty providers need to know that the business models they have built to serve Michigan's most frail will remain consistent.

- Support the Governors funding recommendations for the MI Choice Medicaid Waiver, Skilled Nursing Facilities, Home Help and PACE.

- Provide funding for the Affordable Assisted Living Program within the geographic regions of the Dually Eligible.

- Consider development of a 1915(i) waiver to support frail seniors in independent senior housing and affordable assisted living venues. Development of an effective case management and personal care program would delay institutionalization and improve quality of life for Michigan frail seniors. This program is currently an option under the Affordable Care Act.

Thank you for taking the time to discuss **LeadingAge Michigan's** priorities. Please do not hesitate to contact me with any questions or concerns you may have regarding long-term care in Michigan.

David E Herbel

David E. Herbel
President and CEO

DCH SC 2-25-13
Did not speak

MICHIGAN Primary Care ASSOCIATION

Michigan Primary Care Association

House Appropriations: Department of Community Health, February 25, 2013
Doug Paterson, MPA, Director of State Policy
Supporting Medicaid Expansion

The Michigan Primary Care Association represents the 35 Federally Qualified Health Center organizations in Michigan – and more importantly, the 600,000 Michigan residents who depend upon these Health Centers for their health care needs. Today, Michigan's Health Centers operate over 220 clinical sites that provide medical homes in communities across the state and provide medical, dental, and behavioral health care services to our state's residents living in underserved areas and populations. One characteristic that makes Health Centers unique is that our doors are open to all, regardless of income or insurance status. Health Centers currently serve 12 percent of the state's Medicaid beneficiaries for just 1.2 percent of the state's Medicaid expenditures, and over 32 percent of Health Center patients are currently uninsured.

MPCA and Michigan's Health Centers are testifying today in support of Medicaid expansion. We believe this is a critical opportunity to increase Michigan's population health while creating significant cost-savings for the state. Moreover, Medicaid expansion will afford Michigan Health Centers the ability to serve more patients, making communities healthier through a focus on prevention. We have good evidence that people served by Michigan's Community Health Centers use emergency rooms significantly fewer times than those in other fee for service settings or by uninsured patients without medical homes.

Cost Savings

The fiscal benefit to our State that would result from the expansion of Medicaid is undeniable. Analyses conducted by both the Michigan Senate and House Fiscal Agencies show Michigan will save over 200 million annually. Moreover, the University of Michigan's Center for Healthcare Research and Transformation (CHRT) concluded in their objective analysis that Michigan will save up to $1 billion in the next decade if the state chooses to expand Medicaid. And with the Governor's proposal to take half the savings and create as State Health Saving Account, no cost would accrue to the State for the next 21 years. Underlying these analyses is the affirmation of the benefits of primary care and prevention and their ability to prevent people from utilizing the emergency room—an expensive and inappropriate alternative to routine care. Medicaid expansion is both good politics and even better policy, saving both lives and money.

Economic Benefit

We believe Medicaid expansion also provides a unique economic opportunity for Michigan. Last week at the annual meeting of the Michigan Society of Association Executives, Senators Richardville and Whitmer along with Representatives Greimel and Bolger all four agreed on one thing, the top objective in our state is the stimulation of our economy and the creation of jobs. As Mr. Fitton pointed out your decision to expand Medicaid in our State will pump over 3 billion dollars into our economy over the next ten years and create over 13,000 jobs immediately. In addition, this would also create the first opportunity for some time to reduce the cost of health insurance to employers. As Mr. Fitton's testimonies both today and previously have pointed out, with the death spiral of uncompensated care ended, (the one we have been in where uncompensated care increases the cost of insurance that employers provide, where with each such increase another percentage of employers discontinue insurance for employees thus creating more uninsured, causing more uncompensated care and so on) for the first time in decades there is a mechanism available to end that spiral and actually decrease the cost of private health insurance by an estimated 3%. How can we not take advantage of this economic opportunity?

Capacity

One of the questions Governor Snyder had regarding Medicaid expansion centered on capacity. In a joint press conference with Governor Snyder at Sparrow Hospital two and a half weeks ago, Michigan's health care provider community, including Health Centers, hospitals, physicians, and mental health facilities, indicated their ability to meet new patient demand. In addition, the University of Michigan's Center for Healthcare Research and Transformation concluded that 81 percent of Michigan's primary care physicians have capacity to serve the expanded Medicaid population.

Specific to Health Centers, from our own internal analysis, we estimate Health Centers have the capacity to immediately serve 100,000 newly enrolled Medicaid beneficiaries, and another 100,000 patients of the newly eligible population over the next two years, comprising nearly half of the estimated 450,000 people who are expected to be newly enrolled in the program. The transition of uninsured to Medicaid is expected to yield $50 million of new revenue for Health Centers. Since Health Centers are completely non-profit in nature, all of these new funds will be used to expand access to care to the newly eligible Medicaid population. It is our goal that within 10 years, Health Centers will expand services to every county in Michigan. You can help us make this happen at no cost to our State.

Population Health

Finally, Medicaid expansion creates a wonderful opportunity to improve the health of Michigan residents. You are all aware of studies that have shown that we are an unhealthy state. We are overweight, smoke too much, have high percentages of chronic disease and don't exercise nearly enough. We must begin to invest in more the overall health of our residents. The Oregon study that Mr. Fitton alluded to provides evidence that shows us how we can improve the overall

health of our state's residents. People with insurance are healthier. Those in poverty are sicker than those of us above the poverty line and Medicaid expansion offers the opportunity to improve their heath. That is the right thing to do.

Conclusion

Michigan's Federally Qualified Health Centers stand ready and have the capacity to care for a major portion of Michigan's uninsured, and we are eager to serve those soon to be Medicaid eligible—working adults and families that are our neighbors and friends.

We urge the Michigan Legislature to support Governor Snyder's recommendation to accept the federal government's offer to pay for expanding Medicaid in Michigan. Expansion is one more step toward ensuring all Michigan residents have access to comprehensive, affordable health care. This is too important to turn away—expansion will save lives and save money.

Komen Affiliates
MAKING AN IMPACT.

SUSAN G. KOMEN FOR THE CURE.
Mid-Michigan
Southwest Michigan
West Michigan
Northwest Ohio
Komen Detroit Race for the Cure®

Did Not Speak

Written Testimony Regarding Medicaid Expansion
Submitted to the House Community Health Appropriations Committee
By the Michigan of Susan G. Komen for the Cure®

Thank you for the opportunity to provide written testimony to the Michigan House Community Health Appropriations Committee. **On behalf breast cancer survivors, co-survivors, and women throughout the state, the Affiliates of Susan G. Komen for the Cure® serving Michigan urge you to expand Medicaid to 133 percent of the federal poverty level and assist Michigan's nearly half a million uninsured women in getting access to life saving breast health services.**

In 2013, an estimated 8,140 Michigan women will be diagnosed with breast cancer and 1,360 will die from the disease. Early detection is key to survival: if detected early before the cancer spreads beyond the breast, the 5-year relative survival rate is 98 percent. That number plummets to 23 percent once the cancer spreads to other parts of the body.

Many women are forced to delay or forego breast cancer screenings because they do not have health insurance. In fact, an estimated 10% of cancer patients nationwide are uninsured at the time of their diagnosis. Tragically, many women who delay screening will be diagnosed with late-stage cancers that are more difficult to treat. This impacts every Michigan taxpayer, as public funds are often tapped to cover the cost of uncompensated care.

As the federal government will cover the entire cost of the Medicaid expansion for the first 3 years and pay the cost at 90 percent thereafter, the state has an unprecedented opportunity to cover hundreds of thousands of Michigan residents at little to no cost to taxpayers.

The Michigan Affiliates have long been partners with the state the fight against breast cancer. Together, our Affiliates invested over $2.5 million in local communities last year alone for early detection and treatment of breast cancer and for breast health education and outreach.

We hope we can continue to count on the state to do its part to ensure that Michigan's women have a fighting chance against breast cancer. **We urge you to take advantage of this opportunity to help underserved women in our state receive the breast health and cancer care they need. For many of them, these services could save their lives.**

Thank you for your consideration.

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DCH SE 2-25-13
[Did not speak]

MICHIGAN OPTOMETRIC ASSOCIATION

Affiliated with American Optometric Association

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The Michigan Optometric Association supports Governor Snyder's recommendation for Fiscal Year 2014 to again include funding for the Medicaid Well-Vision Services for Adults line item.

The Center for Medicare and Medicaid Services allows optometric services to be a part of the state's Medicaid assessment. However, prior to Fiscal Year 2013, and not since 2009, the State of Michigan had not offered the full scope of optometric services within the Medicaid program and previously was neglecting Medicaid patients a beneficial service that helps with their quality of life. Thanks to the work of lawmakers in the appropriations process last year, Michigan restored adult optometric services into the Medicaid program and allowed the state to use assessments on vision claims to fund the benefit for FY 2013.

Estimates from the Kaiser Family Foundation show that about 1 million adults in Michigan will be eligible for Medicaid starting in 2014 and they will require care from qualified professionals. Optometrists practice in 74 of 83 counties in Michigan and provide more than two-thirds of all primary eye and vision healthcare in the state and serve as an initial contact for many patients who are entering the healthcare system. When Medicaid patients come into the office to utilize their vision benefit, optometrists can diagnose and treat chronic diseases like glaucoma and cataracts. In addition, through the comprehensive eye exam optometrists can initially diagnose a diabetic patient and refer that patient to a primary care provider for an early intervention; early intervention in chronic diseases like diabetes will save the Medicaid program money.

The recently released Executive Budget currently assumes the continuation of the funding of the Medicaid Well-Vision Services for Adults line at the FY 2013 levels, and the Michigan Optometric Association supports this recommendation. We urge lawmakers again to support this vital piece in order to help improve the visual health of adults in our state through prevention, early detection, timely treatment, and rehabilitation.

DCH SC 2-25-13 [Did Not Speak]

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February 25, 2013

The Honorable Matt Lori, Chair, and
Members of the House Appropriations Subcommittee on Community Health
P.O. Box 30014
Lansing, MI 48909-7536

Re: *FY 2014 Department of Community Health Budget*

Dear Chairman Lori and Members of the Committee,

We are writing on behalf of AARP Michigan to highlight and offer our support for two items in particular in the proposed FY 2014 Department of Community Health budget: *Medicaid Expansion*, and *Home and Community Based Services*.

Medicaid Expansion. Beginning in 2014, states will be allowed to include residents with incomes up to 133 percent of poverty – about $20,000 a year for a family of 2 – under Medicaid. **AARP strongly supports the proposal as set forth in the Governor's FY 2014 budget recommendation to allow an additional 470,000 uninsured Michigan residents to qualify for health care through Medicaid Expansion, reducing the number of uninsured Michigan residents by 46%.**

This issue is particularly important to AARP members who are over age 50 and not yet eligible for Medicare. During this historic economic recession, many older workers have lost their jobs and their employer-sponsored insurance coverage. Older adults are particularly vulnerable to deterioration in function and health status if they do not have health coverage, inevitably increasing their need for and use of health care and long term care in the future. Expanding Medicaid to include residents with incomes up to 133 percent of poverty would provide health coverage for an estimated 75,000 Michigan residents aged 50-64 who are currently uninsured.

As the Department of Community Health has testified, pursuing Medicaid Expansion as set forth in the Governor's FY 2014 budget recommendation will result in savings of $206 million in the state budget in FY 2014 alone. Similarly, the Senate Fiscal Agency has noted that "while there would be long-term GF/GP costs for the expansion, there would be savings that would more than offset any costs from the first day." Medicaid Expansion will also lower uncompensated care costs and is expected to lower private insurance premiums for individuals and businesses across Michigan by an estimated 3.06%. Medicaid Expansion saves money and saves lives.

Home and Community Based Services. AARP supports the expanded availability of Home and Community Based Services (HCBS) for people who need long term care, and we support continued efforts toward rebalancing Michigan's long term care system to provide a greater proportion of long term care services through HCBS, rather than in institutional settings. **Toward this end, we support the Governor's proposal to increase funding for the MI Choice Medicaid Waiver program by 6 percent ($17.5 million) in the FY 2014 budget.**

AARP Michigan is committed to ensuring that the long term care system in Michigan promotes consumer independence, choice, and dignity. Furthermore, rebalancing our long term care system in such a way as to provide more long term care services in people's homes and communities, rather than in nursing homes, saves taxpayer dollars. As of 2011, Michigan's long term care system was ranked #31 in the nation according to *Raising Expectations (2011), A State Scorecard on Long-Term Services and Supports for Older Adults, People with Physical Disabilities, and Family Caregivers.* According to a 2011 Thomson Reuters analysis, the percentage of total public dollars spent on non-institutional long term care services for older adults and people with physical disabilities in Michigan was only 21.6%, compared to 78.4% that was spent on nursing home services. That analysis compared Michigan with all other states and found that 35 states spend a smaller proportion of their long term care dollars on nursing homes than we do in Michigan, many of them quite significantly. With the passage of the FY 2013 Department of Community Health budget, the State of Michigan took some important positive steps toward increasing the availability of HCBS in Michigan, but there is still tremendous room for improvement. The inclusion of increased funding for MI Choice in the FY 2014 budget will continue Michigan's positive steps toward rebalancing.

AARP further encourages the State of Michigan to apply for additional federal funding for HCBS through the State Balancing Incentive Payments Program (BIPP) and/or Community First Choice Option (CFCO) program. BIPP is a temporary, non-competitive grant program designed to encourage states to rebalance their Medicaid spending toward HCBS. If Michigan chose to participate in BIPP, our federal matching rate would increase by 2% from now through October 2015. The CFCO program allows states to expand home and community based services under Medicaid Section 1915k to add a new participant-directed HCBS attendant services benefit. This option can serve individuals with incomes above 150% of the federal poverty guidelines, up to 300% of SSI, who meet Medicaid's "institutional level of care" eligibility requirements, and it can serve Medicaid eligible individuals with incomes up to 150% of the federal poverty guideline who do not need an "institutional" level of care. If Michigan chose to participate in CFCO, we would receive a permanent federal match increase of 6% over our normal rate for the HCBS services we offer through this program.

We appreciate the opportunity to share this information with the subcommittee, and thank you for your work on these important issues. If you have any questions or if there is further information we can provide, please feel free to contact Felicia Wasson at 517-267-8917 or fwasson@aarp.org, or Lisa Dedden Cooper at 517-267-8923 or lcooper@aarp.org.

Sincerely,

Jacqueline Morrison
State Director

William McCarty
State President

AARP is a nonprofit, nonpartisan 501(c)(4) social welfare organization that advocates on issues that matter to people aged 50 and over, and their families. More than 1.4 million Michigan citizens are AARP members.

DOH SC 2-25-13
[Did not speak]

Earlean Greenfield RN
A&D Waiver Division
(989) 249-0929

Home and Community Based Services Waiver Program

A&D Home Health Care, Inc. serves as a Waiver Agent in the Region 7 Service Area of the State of Michigan. As a Waiver Agent, A&D provides services to a population of "Nursing Home Eligible" Elderly and Disabled program participants who **choose** to reside in the community with needed supports.

The MI Choice Waiver Program provides a cost savings to the State of Michigan; this program helps people avoid Nursing Home Placement. The MI Choice Program also helps current Nursing Facility Residents move back into to the community through the "Nursing Facility Transition Initiative." During the current fiscal year the MI Choice Program will save the taxpayers of Michigan $110.00 per day for each successful nursing facility transition that is performed. Based on the current level of Statewide Nursing Facility Transition Activity: **When 1500 people move back into the community the State of Michigan can expect a savings in excess of $45 million dollars to the Long Term Care Line of the Budget.**

Our work is not yet done. There are more people who we want to help. We implore the legislature to continue to support the efforts of Waiver Agents and the Centers for Independent Living with the implementation of the Nursing Facility Transition Initiative. We would ask that the budget for the MI Choice Waiver Program be increased to support the ability of **2000** people to move back into the community in the coming fiscal year through the efforts of the Nursing Facility Transition Program.

In closing I would like to thank you for the support that the Governor and the Legislature has provided in the past to the Waiver Agents and Centers for Independent Living Agencies which work collaboratively to continue to offer people a **choice** in where they will live. We strive to allow people in need the opportunity to live as independently as possible in the community. I would urge the Legislature to continue to support the MI Choice Program and to expand the opportunity for greater Cost Savings to the State of Michigan Taxpayers in the coming fiscal year.

Thank you for allowing me to provide written testimony.

DCH SC 2-25-13
Rick Murdock
#1 of 2

Michigan Association of Health Plans

House Subcommittee on Department of Community Health Appropriations

February 25, 2013

My name is Rick Murdock and I am the Executive Director of the Michigan Association of Health Plans. Members of our association participate in the Medicaid Managed Care Program through a competitive bid process for the awarding of contracts. Medicaid Health Plans are currently responsible for the delivery of comprehensive health services for nearly 1.3 million Medicaid beneficiaries.

Our membership wishes to thank you for your past support as the FY 13 budget was adopted last year and encourage your support for the FY 14 Executive Budget—and in particular the recommendations supporting Medicaid managed care. The presentation by the Department of Community Health illustrated many of the attributes that our industry provides in the cost-effective delivery of services for Medicaid beneficiaries—my only reaction would be, I know we can do better.

My testimony today is guided by the positions established by my Board of Directors. I have attached to this testimony our complete set of Recommendations and Executive Summary that is part of our annual Medicaid White Paper. In subsequent meetings with you and your staff, we will review these recommendations in more detail—but for today I want to focus my few minutes of testimony on the key challenges before us:

1. Medicaid Expansion
2. Core Support for Current Medicaid
3. A History of Flexibility Within Medicaid

1. **Medicaid Expansion**

Without question or hesitation, MAHP strongly supports Michigan exercising the option to expand Medicaid eligibility. Our mission statement guides us very clearly on this issue where it states that we (MAHP) will "*provide leadership for the promotion and advocacy of high quality, affordable, accessible health care for citizens of Michigan*". The MDCH illustrations on the attributes of managed care and that that will be in our White Paper attest to high quality standards delivered by Medicaid Health Plans in Michigan. Operating a Medicaid Managed Care program continues to save taxpayers over $400 Million a year in federal and state resources (compared to regular fee for service) and since 2000 has realized about $5 billion in savings. This is one of the reasons Michigan continues to operate one of the lowest cost per beneficiary program in the country. Expanding eligibility will now fundamentally address the accessible component of our mission statement. We also understand fully that questions must be asked and answered before taking such a step.

Question: Do we have the capacity for Expansion? Since most if not all of the population under expansion will be enrolled in managed care—that is a question rightfully posed to our industry. **The answer is yes**. This has been answered in two ways. First, Medicaid Health Plans must maintain an active file with MI ENROLLS to identify those providers who are under contract and open to new Medicaid beneficiaries. This file must be updated monthly in order to provide accurate information for those making a choice as to which Medicaid Health plan to join. A summary of the unduplicated providers listed in this file indicates very clearly that not only is existing capacity available—it would continue under scenarios of expansion over the next several years. This assessment was augmented by a recent survey undertaken by the University of Michigan and the Michigan State Medical Society that indicated a vast majority of physicians would accept patients under expansion.

Question: How will we cover the State expenses related to expansion? This question was obviously analyzed fully by the State Budget Office prior to the Executive Budget recommendations. Our own analysis affirms the State Budget Office calculations. Medicaid would pick up expenses for current State GF services (largely in mental health). Assuming a portion of those current GF expenditures are now retained for future needs (Health Savings Account), the cumulative savings between FY 14 and FY 20 would be substantial and meet the out-year exposure of the state. Because the enrollment will be in managed care, the costs will be predictable and based on per member per month capitation

payments. The answer to the question is that the costs (and savings) are largely predictable and can be anticipated to be covered through a state savings program as proposed by the Governor—a recommendation we endorse.

Question: What is the business case for Expansion? We agree with MDCH that the most recent and viable study on uncompensated care costs were published by Families USA based on actuarial studies performed by Milliman. These studies indicated that you and I have been paying a "hidden" tax in our health care premiums of up to $1000 for the annual premium for a family of four. The uninsured have do access to care—but it is to the emergency department and hospital admissions for delayed episodes of care. These costs are then shifted to those who pay premium. By providing coverage for thousands of Michigan citizens without insurance coverage, uncompensated care should be reduced. While there are costs pressures coming to bear on our industry in the future years, reductions in uncompensated care should at least "reduce the rate of increase".

Question: What is the health care value in Expansion? The research is overwhelming. Early intervention in many of the chronic diseases will reduce cost, improve health status, and since many of those eligible for coverage will be the "working poor"—expansion will help produce a healthier workforce. We heartily endorse the principles and recommendations of the Governor's Health and Wellness plan (4 X 4) and believe the performance standards and expectations of change in the population should be part of the performance standards built into contracts to serve this population along with incentives for changing lifestyle.

Question/Comment: We don't have enough details to make a decision. We hear this comment frequently. To put the proposed expansion in perspective: Unlike regular Medicaid where there are numerous eligibility requirements, differing standards depending on fee-for-service or managed care, and benefit definitions-- Medicaid Expansion is relatively simple by comparison. By that I mean we will not have to develop a program or operate a demonstration phase—we can move quickly into full implementation:

- We know the eligibility criteria and process;
- We know the enrollment process and delivery system;
- We know the payment mechanism;

The question really appears to be one in which do we have faith in government to make this work and maintain obligations. Our review of history suggests that Medicaid has been protected time and time again at the federal level.

Our recommendation—and one in which I am sure we are joined by many other organizations—is that we must expand Medicaid and establish coverage for many of our uninsured citizens.

2. Core Support for Current Medicaid

Very briefly, I also need to indicate that we need to amend Michigan's Health Insurance Claims Act, HICA by extending or repealing the current sunset on that legislation AND maintaining an overall rate at or below 1%. We understand the concerns by many regarding the projected shortfall. However, we believe this can be mitigated in part by accounting for future claims that would be paid related to Medicaid expansion and enrollment in Michigan's Insurance Exchange. Adopting a rate more than 1% will put undue pressure on many carriers to pass most of the costs onto consumers and failure to implement amendments to revise HICA, will result in over a $1 billion dollar shortfall in the current Medicaid program.

3. Medicaid Flexibility

Our Association is likely among the first to encourage the Medicaid Program to adopt various programs and interventions that we believe will improve overall health care and improve efficiency (some of these recommendations are in our attached White Paper summary). We do so, because history has shown us how flexible Medicaid can be—and Michigan's Medicaid program has quietly been one of the more efficient and flexible programs across the country. What is often widely praised as innovations in other state Medicaid programs is often a regular and long standing feature in Michigan. This is coupled by the considerable partnerships that many of the provider groups have nurtured with Medicaid –often translated into various provider taxes and assessments and differing mechanism to substitute for general funds. It is this partnership route that the history of Michigan Medicaid has followed and it is most telling when one reviews the one outstanding graphic produced by MDCH. This is the graphic that indicates Medicaid program growth taking place over the past decades while state general fund support has remained flat or even reduced.

While we may have our differences, we are often united in these partnership efforts and if past history is any measure, I expect this will continue into the future. I know it is a role our association intends to continue.

Thank you for this opportunity to comment on the significant challenges facing Medicaid.

DCHSC 2/25/13 Rich Murdock #2 of 2

Michigan Association of Health Plans

Medicaid White Paper—Recommendations and Executive Summary

RECOMMENDATIONS FOR FY 14 AND BEYOND

1. The State of Michigan should continue to **assure actuarially sound rates** as the underlying principle in support of Medicaid Managed Care. All Medicaid Policy bulletins issued by the Department after "Actuarial Soundness" federal approval should include economic analysis to demonstrate that the approved rates are not compromised by proposed changes in Medicaid Policy.

2. The State of Michigan should implement the option to **expand Medicaid Eligibility** to 133% of Poverty.

3. The State of Michigan should renew the **Health Insurance Claims Assessment**, HICA, Act by extending or repealing the current sunset (December 31, 2013)—while maintaining a rate of no more than 1%.

4. The State of Michigan should consider implementing an **Integrated Long Term Care Initiative** to parallel the implementation of the CMS/MDCH Initiative for Dual Eligibles that will now be limited to 4 regions of the state.

5. The State of Michigan should **continue to improve and reform Medicaid eligibility** by:
   a. Operationally, creating a default eligibility and enrollment for newborns to be assigned to the same Medicaid health plan as the mother at the time of birth (consistent with the terms of the Medicaid Contract).
   b. Considering the option to delink Medicaid application from other human services program applications in order to accelerate eligibility and enrollment.
   c. Implement a user-friendly system for beneficiaries and Medicaid Health Plans for determining expanded Medicaid eligibility and enrollment choices at the time of eligibility—similar to the system used for enrollment of MI CHILD.
   d. To help reduce enrollment and eligibility "churning", Michigan should consider the feasibility of implementing either a bridge plan or basic health plan in conjunction with the Insurance Exchange.

6. The State of Michigan should continue their efforts in **streamlining and coordinating the administration and oversight** of Medicaid Health Plans and related contracted entities by:
   a. Merging the state administered contracts for MI CHILD and Medicaid Health Plans at the next earliest opportunity;

b. Reduce or eliminate paper requirements in lieu of electronic documents and web-based information sites and begin using "deemed compliance" by virtue of national accreditation such as NCQA or URAC; and
c. Changing the regulatory perspective to a "regulation by exception"—that is focused on contractors who may not be meeting standards established in the contract.

7. The State of Michigan should continue efforts to **maximize all levels of non-GF Revenue** (Federal, special use, local revenue, and cost avoidance) to protect Michigan's Safety Net. This focus would continue and expand efforts for:
   a. Medicaid Health Plan Special Access and Supplemental Programs to assure outreach and coverage for Medicaid beneficiaries;
   b. Securing additional federal support into Medicaid, including FQHC, grants and programs to bring wellness and prevention as a key component of Medicaid;
   c. Increasing third party collections for Medicaid Managed Care Plans by providing access to other carrier data, including auto and BCBSM and designating Medicaid Health Plans as "agents of department" for purposes of this function.
   d. Improving fraud and abuse coordination through the Medicaid Inspector General Office and working with a variety of organizations regarding the development of more community based care to reduce current high cost utilization of care.
   e. Continue to develop an enhanced beneficiary monitoring program within managed care to effectively control high utilization of services while maintaining access.
   f. Developing an effective Observation Stay reimbursement policy and incentives for alternatives for Emergency Department use.
   g. Continue and expand efforts to support medical homes and other forms of diversion from emergency department inappropriate use.

8. The State of Michigan should assure that the **full six years of the Medicaid Health Plan Contract Terms** (3-year contract and all of the 3 one-year extensions) are completed.

EXECUTIVE SUMMARY

"Policy makers, administrators and the public expect (and receive) value from the Michigan's Medicaid managed care program. This is largely due to the nature of the performance-based contract, the inherent flexibility of a managed care system, and the emphasis on prevention, care coordination and disease management. The most obvious strength is cost savings."

Value in Managed Care

There continues to be an estimated savings of $400 million each year due to the Medicaid Managed Care program compared to fee for service. This savings has now yielded more than **$5.0 billion in total savings** between FY 00 and FY 12. The savings reflect the cumulative impact of competitive bidding, performance contracting, and more efficient management of health care in a partnership with the state in exchange for actuarially sound funding. This return

on investment enables both the State of Michigan and the federal government to redirect savings from Medicaid managed care to support programs in other high priority areas while preserving access to quality health care services for the vulnerable populations served by Medicaid program.

What is even more of value is the high quality that is the hallmark of managed care. The continued high performance ranking of Michigan's Medicaid Health Plans is a testament of the dedicated efforts of each of the health care partners in this arrangement; state administrators who set the standards, providers who deliver the care as part of the provider networks, and contracting health plans who put it all together.

Once again, the Michigan Medicaid Health Plans have been cited as among the best in the nation by Consumer Report/NCQA America's Best Health Plans. Their 2012 ranking cited Michigan Health Plans for excellence in all three categories: commercial, Medicare, and Medicaid. Specifically, Michigan Health Plans are among 11 of the nation's top 100 Medicaid plans; 6 of which were in the top 25.

What's next?

While there is still much more work to be done, MDCH and the Medicaid health plans have been very active in working through operational details and enrolling special populations into managed care to improve access, coordinate care and provide more cost effective and accountable care. This is in addition to the 1.3 million beneficiaries already enrolled in managed care. These special efforts already underway include:

- Completing the enrollment of Foster Care Children into managed care;
- Completing the transition of enrollment of Children's Special Health Care Services, CSHCS that began October 1, 2012.
- Default enrollment of the Dual-Eligible Population into the Medicaid plans process for their physical health care services. (Separate from the MDCH/CMS Demonstration Initiative);
- Working with MDCH to implement a reimbursement increase for primary care providers—to a level consistent with Medicare. This program will be retroactive to January of 2013 and is 100% funded by federal dollars under the ACA and was part of the FY 13 enacted budget approved by the legislature.
- Working with MDCH to begin implementing (April 2013) an enhanced beneficiary monitoring program to effectively control beneficiaries with high utilization of services while maintaining access to needed care.

Limited Duals Initiative.

The experience of the Medicaid Health Plans in Michigan and confidence by the Department (as illustrated by the activity cited above) was a stepping stone for taking the next steps in assuring quality health care for Michigan's vulnerable population—Michigan's seniors who qualify for both Medicare and Medicaid services. As is well known, Michigan conducted an exhaustive stakeholder process over the past year to develop an approach of delivering integrated health care

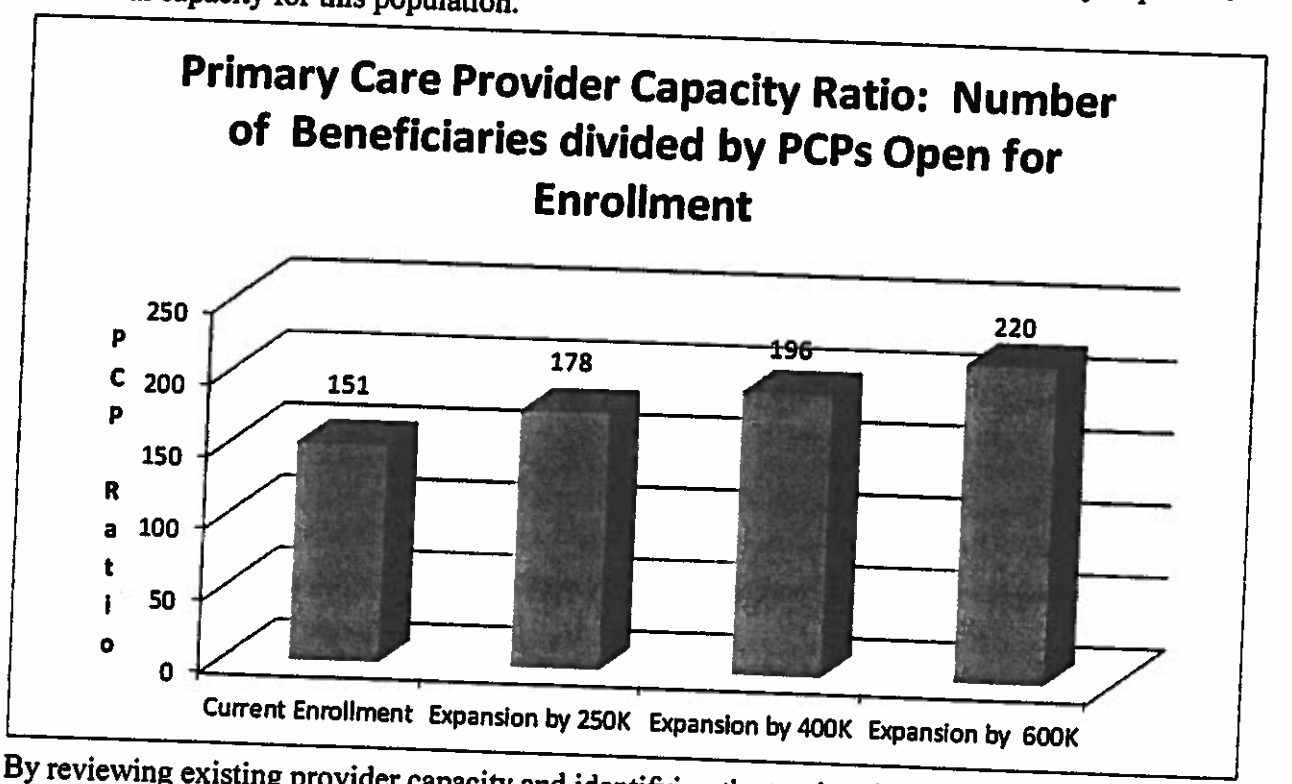
services for persons eligible for Medicare and Medicaid services—sometimes referred to as "Dual Eligible". This effort is also seen as a way that we can begin to unify the delivery of physical and behavioral services.

The on-going negotiations with CMS since the April 2012 MDCH submission of the proposed plan of integration have now resulted in the tentative agreement for a regional demonstration project. As part of this demonstration, Michigan's Health Plans will be competitively selected to participate. The department will issue a Request for Proposal (RFP) in the near future with a very tight timeline to select carriers and have coverage available as early as January of 2014.

Since the targeted demonstration project will be functioning in 4 regions of the state (Wayne County, Macomb County, SW Michigan Region and the Upper Peninsula Region), there remains an opportunity for developing an integrative approach for long term care in the rest of Michigan to capitalize on the considerable work by health plans, members of the Health Care Association of Michigan, MI CHOICE waivers agencies, and others.

Medicaid Expansion

This expansion could result in the addition of approximately 450,000 to 500,000 Medicaid lives added to the program over time, most if not all will be enrolled in managed care. However, like any other program the initial year of implementation is likely to reach at least 2/3^{rds} of the targeted population with full implementation in year two and forward. One of the stated concerns with the question of expansion has been the Medicaid Health Plans ability to provide additional capacity for this population.



By reviewing existing provider capacity and identifying the total unduplicated number of

providers open to Medicaid enrollment a PCP ratio is created. This PCP ratio of the currently contracted providers indicates there is sufficient capacity for this expansion when differing levels of expansion are calculated. Moreover, the Michigan State Medical Society and University of Michigan recently completed a survey of physicians and their willingness to accept new patients under expansion. Their results also confirm that there is not only existing capacity to serve the additional enrollment—there is willingness to do so.

While Medicaid Health Plans continue to play a critical role in the movement of eligible populations into a more cost-effective and accountable system of care, there is more that can be done by both the State of Michigan and participating Health Plans. The efforts to increase enrollment into managed care will also increase the need to become more efficient in the eligibility process and overall contract administration in order to reduce unnecessary costs that are built into current systems.

Extend or Repeal the Health Insurance Claims Act, HICA

Part of the underlying revenue base used to support the current Medicaid program are funds collected from the Health Insurance Claims Act that became effective in 2011. While there remain concerns about the targeted yield of HICA, there should be no doubt that without extending the current 12/31/13 sunset or repealing the sunset, more than $1 billion dollars in Medicaid support will be lost (combination of HICA revenue and federal match). While we do not yet know the total shortfall of HICA (4th quarter payments are just being paid as of preparation of this document), we do know that some of this shortfall will be addressed by expansion of Medicaid and implementation of the Insurance Exchange in Michigan—both of which were never factored into the initial calculation of total claims.

Reform Eligibility

The sooner an eligible person becomes enrolled into a Medicaid Health Plan, the more effective and timely care can be provided and coordinated. A good example of where improvements can take place is with newborns. Now that the Medicaid Program has moved the Children's Special Health Care Services, CSHCS, enrollment into managed care, it is critical that newborns be identified and enrolled into the same health plan as the mother in the birth month. While this provision is included in the Contract with Medicaid Plans, operationally it has always been delayed for months which creates retroactive enrollment during a critical period of time for coordinating care.

As we look to the new eligibility system that will be established for the expanded population under ACA—up to 133% of poverty (note—operationally it will be 138%) reform of the existing system should take place. Performance standards of care imposed on Medicaid Health Plans under the State's Contract are more achievable with timely enrollment. It may be time to consider a Medicaid-only eligibility system rather than one in which other social support programs is linked. Other efforts should assure that the eligibility re-determination process becomes more transparent in order for Medicaid Health Plans to identify and assist beneficiaries.

This effort will result in more continuity of care and improved date and accountability as HEDIS measures are based on "continuous enrollment" files.

Streamline and Coordinate Administration and Oversight

The Department should be commended for continuing to meet with Medicaid Health Plans on a regular basis to jointly discuss how the program can be improved. In addition to those conversations, the following areas should receive more attention over the next year:

- Merging contracts for MICHILD with Medicaid. This will eliminate some administrative costs, focus more on performance and accountability using the audited data requirements that exist for Medicaid, and would eliminate a current cost-settlement program with BCBSM that costs between $12 and $15 Million each year.
- Reduce paper requirements in lieu of access of electronic documents and web-based information sites.
- Continue the identification of areas that can be considered "deemed compliant" as a result of national accreditation and change the focus of contract oversight to raising the performance of those contractors that are under the state average.
- Coordinate efforts for identifying and managing beneficiaries who have high utilization of care, particular in emergency departments and in pharmacy.

Finally, as most of Medicaid beneficiaries are or will be enrolled in managed care, it is time for the development of Medicaid policy to be developed through the "lens" of managed care and not based on "fee for service". Under the Medicaid Contract, once a policy is adopted, Medicaid Health Plans must comply. Often, this requires modifications of systems, adjustments of internal protocols and policies—all of which add administrative costs. Further, these policies are often developed after the annual rates for Medicaid Plans are approved by the CMS—therefore, costs must be absorbed within the existing rates—although were never part of underlying assumptions.

Maximize non-GF Revenue

The success of Michigan Medicaid has historically been due to the ability to identify and implement programs that establish non-general fund support. As a result, the overall state general fund support for Medicaid has stayed largely static over the past years—while overall enrollment and related expenditures has increased significantly. It is vitally important that this effort continues and be enhanced where possible. Medicaid Health Plans have been highly supported in several direct ways:

- Medicaid Health Plans continue to pay taxes to support Medicaid—first through a HMO Quality Assurance Assessment Program, QAAP; then through payments to the state's use tax; and now as part of the Health Insurance Claims Assessment Act, HICA.
- Medicaid Health Plans provide transfer payments for Michigan's Hospitals to account for uncompensated care and graduate medical education programs; to

Specialty Programs at our Medical Schools to assure assess to care; to adolescent centers and programs to provide the core funding for teen health centers and health education curriculum.

- Medicaid Health Plans are expected to increase the identification and collection of third party insurance in order to reduce Medicaid exposure.

Additionally, the areas of fraud and abuse are areas that Medicaid Health Plans work closely with the Michigan Attorney General's office and the Medicaid Inspector General—and expect to do so even more in the future years. Cost avoidance through this coordinated effort is one of the expected outcomes.

Finally, the area of "waste" is one area that is of concern to all payers. Health care reform cannot truly take place unless the cost of health care is reduced—this will affect Medicare, Commercial and Medicaid services together—and solutions should be seen not just as a Medicaid issue but much broader. We know that at many as 20% of admissions are for treatment and care that could be provided in a community outpatient setting—IF—such settings and programs were available. Efforts toward more medical homes and early treatment and interventions—prevention—will also reduce the costs. Finally, all citizens, including those on Medicaid need to have incentives to take personal responsibility for managing their own health care. The implementation of Michigan's health and wellness plan—also known as the 4 X 4 Plan is a good start in this effort.

Avoid Costly Rebid

The Department of Community Health has many initiatives commencing in the current year and to continue into FY 14 which include:

1. Development of the plan for the Integrated Care for the persons with dual eligibility Project –now a regional demonstration which will require extensive negotiation with CMS along with necessary Waivers and/or state plan amendments. Procurement to competitively select health plans (RFP) will also be prepared, reviewed and contracts issued in the next several months.
2. The Michigan Market Place (the Insurance Exchange) will change the face of insurance selection for the citizens of Michigan and is under development through a federal partnership model with the federal government. Medicaid needs to be part of the systems development in order to coordinate the enrollment of expanded Medicaid eligibility.
3. Medicaid expansion will require a number of administrative activities, from the systems coordination (mentioned above) to statewide awareness campaigns, enrollment packages, and contract revisions with Medicaid Health Plans.
4. Under development is the new version of diagnoses codes, namely the ICD-10, an enormous system change undertaking in health care and costing already millions of dollars in system changes.

All of these initiatives require a tremendous amount of staff resources and expertise of both the state of Michigan and its consultants and the current and interested health plans who would submit proposals for review. MAHP continues to recommend that Michigan utilizes the full option of 3 one-year extensions and until the scheduled end date of September 30, 2015.

As documented further our White Paper, the quality of the services provided by Medicaid health plans continues to be high as evident in the national rankings of the health plans. In addition, Medicaid health plans have and continue to document that they have adequate capacity to fulfill the needs of the current Medicaid population as well as the anticipated growth. Therefore, there is no need to re-bid this contract because of poor performance or unmet capacity.

Summary

- **Enrollment of Population Groups into Managed Care Saves Dollars and Improves Care.** In addition to the cost savings that the management of this population will realize, the actual care and treatment in a managed environment lends to better and more efficient health care as documented by external auditors and performance contract requirements by the State of Michigan.

- **Enrollment of Population Groups into Managed Care creates Administrative Efficiencies.** With the multiple initiatives and programs occurring in the Medicaid program, movement toward a single benefit contract covering all of the programs creates administrative cost savings. We believe further state oversight responsibility and contract management could be consolidated for more efficient administration of programs. Coupled with electronic capabilities and other streamlined tools for contract management, a realization of savings to the contractors and thus a savings in the cost of the contracts would be accomplished.

- **Enrollment of Population Groups into Managed Care will reduce Fraud and Abuse expenses and highlight savings potential that will reduce "Waste".** There are various best practice models for state governments to address the ever present fraud and abuse from the Medicaid beneficiary as well as some Medicaid providers. Michigan Medicaid applies these best practices which creates a significant health savings without compromising the quality of care or access to care.

  In addition, studies have indicated that there are areas of potential savings if the waste in our health systems could be addressed. For example, Medicaid hospital utilization is significantly higher than the commercial utilization. By lowering that difference we could save millions of dollars. Examples of initiatives to address this hospital utilization are to tackle of the problem of readmissions to the hospital within 30 days of discharge and the development of a workable observation room policy.

  Another initiative taking place in the Medicaid program is the enhancement and enforcement of the Beneficiary Monitoring Program. The Medicaid health plans will be involved in this program and will be able to monitor and sanction Medicaid beneficiaries who do not follow Medicaid protocol and abuse the system. This will create a cost savings by virtue of avoidable Emergency Department visits and pharmacy management.

DCH SC 2-25-13 Meghan Swain #1 of 6

MICHIGAN ASSOCIATION FOR LOCAL PUBLIC HEALTH

House Department of Community Health Subcommittee of Appropriations
Testimony
February 25, 2013
Meghan Swain, Michigan Association for Local Public Health

"The function of protecting and developing health must rank even above that of restoring it when it is impaired." ~ Hippocrates

Good afternoon Chairman Lori and members of the committee. My name is Meghan Swain, Executive Director of the Michigan Association for Local Public Health. I represent the state's 45 local public health departments, but more importantly, I represent the 9.8 million citizens who use Michigan's public health system in safe food, safe water, sewage, access to immunizations, children's hearing and vision screenings, infectious disease control, and emergency preparedness.

What is public health? It is the science and art of preventing disease, prolonging life and promoting health through the organized efforts and informed choices of society, organizations, public and private, communities and individuals. (1920, C.E.A. Winslow). It is concerned with threats to health based on population health analysis.

The DCH budget includes the Essential Local Public Health Services line item, which the Governor has held harmless in his budget. However, I continue to ask for restored dollars because the need for public health never goes away.

Essential Local Public Health Services include nine (9) mandated services that the State of Michigan requires and financially supports local health departments to carry out. They include immunizations, infectious disease control, sexually transmitted disease control and prevention, hearing screening, vision services, food protection, public water supply, private groundwater supply, and on-site sewage.

This past year, Michigan's public health system has dealt with a meningitis outbreak from injectable steroids (62 cases in 4 counties – 5 deaths), the West Nile Virus (223 cases in 19 counties – 13 deaths), K2 Spice, Bath Salts, and most recently the flu. As of October 1, 2012, there have been 7,224 laboratory-confirmed influenza-associated hospitalizations reported nationwide. Michigan has had 321 hospitalizations and 5 deaths (4 children).

And yet, over the last few years local public health has taken several cuts including Essential Local Public Health Services, the Healthy Michigan Fund, revenue sharing, tobacco dollars, emergency preparedness dollars, and personal property tax is all but eliminated. All of these cuts have lead to cuts in staffing, program elimination, services reduced, and compromising the health and safety for the citizens of Michigan.

We ask for restored dollars to protect the citizens of Michigan at a time when the state is moving forward, leading the rest of the country.

In addition to restoring dollars to Essential Local Public Health Services, we ask you to pass the Governor's recommendations to expand Medicaid, Healthy Kids Dental expansion, Health Innovation Grants, Health and Wellness, and infant mortality reduction plan.

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Essential Local Public Health Services (Mandated ~ Cost Shared Services)

MICHIGAN ASSOCIATION FOR LOCAL PUBLIC HEALTH

Michigan Public Health Code – Act 368 of 1978 ~ MCL 333.17015

Sec. 904: Allocations to local public health operations; contractual standards; distributions; report.

(1) Funds appropriated in part 1 for local public health operations shall be prospectively allocated to local health departments to support immunizations, infectious disease control, sexually transmitted disease control and prevention, hearing screening, vision services, food protection, public water supply, private groundwater supply, and on-site sewage management. Food protection shall be provided in consultation with the Michigan department of agriculture. Public water supply, private groundwater supply, and on-site sewage management shall be provided in consultation with the Michigan department of environmental quality.

(2) Local public health departments will be held to contractual standards for the services in subsection (1).

Food Protection - This service is intended to minimize the risk of foodborne illness to persons consuming food from licensed food service establishments. Secondary objectives include the satisfaction of reasonable customer expectations relative to sanitation, and protection of the environmental quality in the vicinity of food service establishments. Elements of this service include plan reviews, licenses and permits, inspections, complaint investigations, enforcement actions, and investigations of reported cases of foodborne diseases.

Private Groundwater/Public Water Supply - Works through education and regulation to assure the proper installation, operation, and abandonment of the water supplies serving private and public water supply users. This is accomplished through issuance of well permits for all water wells, inspection of well construction techniques, monitoring of water quality, and areas of known or suspected areas of contamination.

On-Site Sewage Disposal Management - Consists of the review of sites proposed for sewage disposal, issuance and/or denial of permits, sewage disposal system evaluations and inspections, plan review, review of proposals for alternative sewage disposal systems, investigations, and enforcement.

Hearing Screening - Includes screening of hearing problems, referral, and health education for the prevention of deafness and the amelioration of hearing problems. The primary focus of hearing services is preschool children (ages 3-5 years) and school-age children.

Vision Services - Includes screening, health education, and referral for the prevention of blindness and the amelioration of vision problems. The primary focus of vision services is preschool children (ages 3-5 years) and school-age children.

Sexually Transmitted Disease Control and Prevention - This program addresses disease transmitted through sexual contact, primarily syphilis, gonorrhea, Chlamydia, and HIV; the element targets the immediate effects and long-term sequelae, as well as prevention of the infections. Surveillance, screening, clinical services, sexual partner referral, and education are major program components.

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Immunization - This program entails the provision of immunizations to the entire population, with special emphasis on pediatric populations, including proper storage, handling and distribution; the assessment of immunization levels to identify susceptible populations and to evaluate the effectiveness of immunization programs; and the assurance of complete immunization coverage among children enrolled in school, daycare or other preschool programs.

Infectious Disease Control - This program renders services that cut across the full range of infectious diseases, including the vaccine preventable diseases, the sexually transmitted diseases, human immunodeficiency virus (HIV) related disease, and tuberculosis. The activities of this program are directed toward preventing infectious disease, the gathering of information concerning the occurrence of infectious diseases, investigating cases and outbreaks of infectious disease, evaluating data and case information, offering treatment in certain instances, and instituting measures to control epidemics.

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Attachment A

MATRIX OF SERVICES OF LOCAL PUBLIC HEALTH

Services	Rule or Statutory Citation	Required =	Basic +	Mandated +	LPHO	Allowable	Notes
		1	1.A.	1.B.	1.C.	2	
Immunizations	PA 349 of 2004 – Sec. 218 and 904; MCL 333.9203, R325.176	X	X	X	X		
Infectious/Communicable Disease Control	MCL 333.2433; Parts 51 and 52; PA 349 of 2004 – Sec. 218 and 904; R325.171 et seq.	X	X	X	X		
STD Control	PA 349 of 2004 – Sec. 218 and 904; R325.177	X	X	X	X		
TB Control	PA 349 of 2004 – Sec. 218	X	X	X			
Emergency Management – Community Health Annex	PA 349 of 2004 – Sec. 218 MCL 30.410	X	X	X			Basic Service under Appropriations Act and Mandated Service, if required, under Emergency Management Act.
Prenatal Care	PA 349 of 2004 – Sec. 218	X	X				
Family planning services for indigent women	MCL 333.9131; R325.151 et seq.	X		X			
Health Education	MCL 333.2433	X		X			
Nutrition Services	MCL 333.2433	X		X			
HIV/AIDS Services; reporting, counseling and partner notification	MCL 333.5114a; MCL 333.5923; MCL 333.5114	X		X			
Care of individuals with serious Communicable disease or infection	MCL 333.5117; Part 53; R325.177	X		X			(4) Financial liability for care rendered under this section shall be determined in accordance with part 53.
Hearing and Vision Screening	MCL 333.9301; PA 349 of 2004 – Sec. 904; R325.3271 et seq.; R325.13091 et seq.	X		X	X		
Public Swimming Pool Inspections	MCL 333.12524; R325.2111 et seq.	X		X			Required, if "designated"
Campground Inspection	MCL 333.12510; R325.1551 et seq.	X		X			Required, if "designated"
Public/Private On-Site Wastewater	MCL 333.12751 to MCL 333.12757 et. seq., R323.2210 and R323.2211	X		X	X		Alternative waste treatment systems regulated by local public health.
Food Protection	PA 92 of 2000 MCL 289.3105; PA 349 of 2004 – Sec. 904	X		X	X		

Services	Rule or Statutory Citation	Required =	Basic +	Mandated +	LPHO	Allowable	Notes
		1	1.A.	1.B.	1.C.	2	
Pregnancy test related to informed consent to abortion	MCL 333.17015(18)	X		X			
Public/Private Water Supply	MCL 333.1270 to MCL 333.12715; R325.1601 et. seq.; MCL 325.1001 to MCL 325.1023; R325.10101 et. seq.	X			X		
Allowable Services						X	This category would include all permissive responsibilities in statute or rule that happen to be eligible for cost reimbursement.
Other Responsibilities as delegated and agreed-to	MCL333.2235(1)					X	This category is NOT connected to express responsibilities within statute, but refers entirely to pure delegation by the department as allowed. In addition to general provision, the Code allows delegations for specified functions.

MATRIX DEFINITIONS

Name	Citation	Description
1. Required Service	MCL 333.2321(2); MCL 333.2408; R325.13053	Means: (A) a basic service designated for delivery through Local Public Health Department (LPH), (B) local health service specifically required pursuant to Part 24 or specifically required elsewhere in state law, or (C) services designated under LPHO.
1.A. Basic Service	MCL 333.2311; MCL 333.2321	A service identified under Part 23 that is funded by appropriations to MDCH or that is made available through other arrangements approved by the legislature. Defined by the current Appropriations Act and could change annually. For FY 2005: immunizations, communicable disease control, STD control, TB control, prevention of gonorrhea eye infection in newborns, screening newborns for 8 conditions, community health annex of the MEMP, and prenatal care.
1.B. Mandated Service	MCL 333.2408	The portion of required services that are not basic services, but are "required pursuant to this part [24] or specifically required elsewhere in state law."
1.C. LPHO	PA 349 of 2004 -- Sec. 904	Funds appropriated in part 1 of the MDCH Appropriations Act that are to be prospectively allocated to LPH to support immunizations, infectious disease control, STD control and prevention, hearing screening, vision services, food protection, public water supply, private groundwater supply, and on-site sewage management.
2. Allowable Services	MCL 333.2403; R325.13063	"Means a health service delivered [by LPH] which is not a required service but which the department determines is eligible for cost reimbursement".
PA 349 of 2004		Fiscal year 2005 Appropriations Act for the Department of Community Health.

M. Swain #3 of 6

MICHIGAN ASSOCIATION FOR LOCAL PUBLIC HEALTH

"Bath Salts"

Public health is a complex system that protects people from unsafe or hazardous conditions, and provides methods of promoting good health and preventing disease. **Public health employs 3 tools to accomplish this goal: assessment of the community, assurance, and policy development.** A recent Michigan story demonstrates the effectiveness of the public health system's ability to respond to a public health emergency, protect the public from undue harm, and reduce healthcare costs.

A new designer drug emerged, and was sold as "bath salts." These "bath salts" were being ingested primarily as a 'cocaine substitute', which often led to an ER visit. Marquette County Health Department (MHD), through proper surveillance and monitoring, was able to detect an increase in ER visits, and noticed that these visits carried similar symptoms.

Assessment Throughout January, 2011, patients presented to Marquette General Hospital Emergency Department with symptoms including extreme paranoia, psychotic features, high blood pressure, days of insomnia, dilated pupils, tremors, diaphoresis(excessive sweating), bruxism (grinding or clenching teeth), compulsive water drinking and motor automatisms (compulsive repeated hand washing, etc.). Several patients were also violent. MHD began investigating the cause of these symptoms, which led to the discovery of the recreational use of "bath salts".

Assurance As part of public health's role, MHD released information about the dangerous effects of bath salts. Widespread media coverage highlighted the dangers of using such designer drugs and raised public awareness. MHD also informed the Michigan Department of Community Health (MDCH) and the Centers for Disease Control and Prevention (CDC), which aided in raising **national** awareness to the dangers of bath salts. MHD, together with the MDCH, approached legislators with the issue.

Policy Development MDCH and Public Health representatives throughout the state promoted the development of policy that classified these bath salts as a controlled substance, which became effective August 1, 2011. In addition, public health promoted legislation that allows the director of MDCH to temporarily designate a chemical as a Schedule I controlled substance if the substance presents an imminent danger to the health and safety of the public.

Because the MHD was able to effectively monitor and assess their community, a dangerous new drug has now been banned, Public Act 88 (HB 4565) was passed and signed into law; a bill that classifies "bath salts" as a Schedule I controlled substance including criminal penalties. SB 789 has been passed by both chambers and will give the director of MDCH the ability to temporarily classify a substance as a Schedule I controlled substance if the chemical presents an imminent danger to the public.

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Medicaid Expansion Resolution

Whereas, pursuant to PA 368 of 1978, Section 333.2433, "A local health department shall continually and diligently endeavor to prevent disease, prolong life, and promote the public health through organized programs…prevention and control of health problems of particularly vulnerable population groups…"

Whereas, on August 13, 2012, at the monthly meeting of the Board of Directors of the Michigan Association for Local Public Health, the following resolution was adopted:

Whereas, under the provisions of the Patient Protection Affordable Care Act, a State can expand its Medicaid program to cover individuals and families earning up to 133% of the Federal Poverty Line. It is estimated that an additional 500,000 citizens of Michigan will be covered under such expansion.

Whereas, under current law, citizens of Michigan will be mandated to either purchase healthcare insurance or pay a tax regardless of State participation in the expansion of the Medicaid Program. Further, any Federal money available for this expansion in Michigan would otherwise be forfeited to the benefit of citizens of other states; and

Whereas, opting out of the Medicaid Program expansion will continue to place an economic burden on hospitals and other health care providers who will not be reimbursed for services they may provide; and

Whereas, by reducing the number of uninsured, state and local costs for uncompensated care for the uninsured will decline;

Therefore be it resolved, that in order to protect the health of all its citizens, especially those most in need, the Michigan Association for Local Public Health Board of Directors strongly urges the State of Michigan to participate in the expansion of the Medicaid Program under the Patient Protection and Affordable Care Act.

Approved by the Board of Directors October 2, 2012.

Branch-Hillsdale-St. Joseph Community Health Agency Recent Successes (2012)

Holding true to its mission "to provide quality and accessible local health services with fiscal responsibility," the health department strives to achieve excellence while remaining cost effective. The following examples of recent Agency successes best illustrate our continued commitment to the Agency's mission:

- Oversaw the implementation of Michigan's Smoke Free Law (Act 188, PA 2009) as it relates to food service establishments. Effective May 2010, this law requires local health departments to assure food service establishments are 100% smoke-free as part of their food inspection program. Staff members have worked diligently with local food establishments to answer questions and provide education on the law's requirements in order to ensure compliance. (May, 2010)

- Partnered with the Michigan Department of Community Health (MDCH) in piloting an electronic automation solution called "Easy Link" for the Children's Special Health Care program. Health Department staff worked with MDCH in implementing user acceptance testing and in training other health departments on the system's ease of use. The Agency was one of two health departments to fully utilize the system during fiscal year 2009/2010. This system streamlines the program's paper work processes by reducing time associated with filing documents, updating files and gaining service approvals. (September, 2010)

- The Area Agency on Aging, working in collaboration with several law enforcement, health and human service agencies, developed and released the St. Joseph County Vulnerable Adult Protocol. This protocol explains mandatory reporting requirements and sets forth the process to assure vulnerable adults the protections due under the law. (September, 2010)

- The Community Health Agency initiated a WIC Peer Breastfeeding Support Program, a paraprofessional-led educational intervention that provides basic breastfeeding information and encouragement to eligible pregnant and breastfeeding mothers. (October, 2010)

- Applied for and received a Public Health Emergency Response Grant for $187,000 and purchased an Electronic Content Management System to automate paper files, reduce storage costs and increase staff and office efficiencies. In addition, funds were used to:
    - Purchase 15 additional laptops that replaced older, outdated computer equipment;
    - Redesign data network in order to introduce redundancy and add remote access to the agency network from any location; and
    - improve building security by installing an electronic key fab system. (December, 2010)

- Assisted with the development and adoption of smoke-free policies at local housing complexes. Branch County Housing Commission instituted a smoke-free policy for Englewood Apartments, a senior citizen complex. This commission was the first in the state to establish a no-smoking policy. Hillsdale Housing Commission, which oversees low-income housing, instituted a smoking ban in Jan. 2011. In addition, the Agency offered smoking cessation programs for residents who smoked. (December 2010/January 2011)

- Worked with Children's Special Needs Fund to identify funding for a wheel chair ramp and to build a customized wheel chair accessible buggy that will hold up to three wheel chairs for Hillsdale County Amish family enrolled on CSHCS program. (January, 2011)

- Opened second Public Health Dental Health Clinic in Hillsdale County as a result of a $396,000 HRSA Grant and Community Funding. Clinic features state of the art state of the art dental equipment, including digital radiography and electronic medical records. (March, 2011)

- Nominated Keith Eichler, Branch County Undersheriff as a Public Health Hometown Hero. Undersheriff Eicher was one of 13 awardees recognized by the Michigan Department of Community Health for their valuable public health contributions. The undersheriff is a strong collaborator, serving on the Agency sponsored Safe Kids Coalition. (April, 2011)

- Nominated Judge Thomas E. Shumaker, St. Joseph County Probate Court as a Public Health Policy Champion. Judge Shumaker was one of seven Public Health Policy Champions statewide recognized by the Michigan Department of Community Health for his work in establishing the St. Joseph County Vulnerable Adult Protocol. (April, 2011)

- Partnered with Three Rivers Community Schools and Three Rivers Health to submit a proposal for a school linked clinic at the Three Rivers Family Clinic. Project was awarded $200,000 for the first year and is renewable for up to five years. During school year 2012, the school-linked clinic saw over 400 students for primary and behavioral health needs. (May, 2011)

- Hosted the Southwest Michigan Environmental Health Association Spring Conference in Coldwater. Over 50 environmental health sanitarians attended the training and received updates on issues related to food protection, ground water protection and other emerging environmental health concerns. (May, 2011)

- Entered into a collaborative relationship with Central Michigan University to accept and supervise senior level health education students through a voluntary intern program. During the past year, the University as provided two outstanding interns who spent a semester working full-time alongside agency staff, honing their skills and growing in professional experience. (May 2011)

- Was recognized by the Southwestern Michigan Perinatal Association (SWMPA), a group of medical professionals that work to improve maternal and infant outcomes for its Healthy Beginning's program. As part of the celebration, the program received a community baby shower. (May, 2011)

- Applied and received $2,725 for a Preconception Education grant that sought to improve folic acid use among Arabic women by improving the educational materials they received. Increase consumption of folic acid is a key to improving birth outcomes and reducing risk for birth defects. (May, 2011)

- Applied for and received the FDA Voluntary National Retail Standards Grant ($2,500) and completed the self-assessment requirement for enrollment in the program. (July, 2011)

- Assisted Michigan State University as it conducted mosquito surveillance for St. Joseph County. (June through September, 2011)

- Applied for and received $15,000 from PNC bank to help support early childhood education through the Healthy Beginnings Program in Hillsdale County. (September, 2011)

- The Community Health Agency, as part of its Food Protection program, trained 103 local food establishment owners and operators as Certified Food Safety Managers. (October, 2010 to September, 2011)

- Partnered with Three Rivers/Sturgis high school technology program to recycle old, outdated and depreciated computer equipment to assist students in learning how to build networks and study system interconnectivity. As a result of this program, students have improved their knowledge and use of technology which has assisted them in state and national competitions. (September, 2011)

- Received the 2011 Michigan Department of Community Health's Director's Award for its Project SLIC (Saving Lives of Infants and Children). Project SLIC is a traffic safety program which uses certified car seat technicians to instruct parents on how to safely install their car seats into their vehicles. It also teaches them why using a car seat is important for their child's safety and when to transition to the next level of safety seats. The program provides car seats free of charge to income eligible families who cannot afford a car seat or who are in need of specialty seats due to weight and size considerations. (October, 2011)

- Kelley Mapes, Community Health Educator with the Health Agency and North Adams Jerome Public Schools were both recognized by the Tobacco Free Michigan coalition for their efforts to promote tobacco-free schools. North Adams Jerome Public Schools was the first school district in the state to adopt a comprehensive, 24/7, tobacco-free school policy that included emerging products. (October, 2011/February, 2012)

- Dr. James Phillips, Agency's Medical Director, was recognized by the Michigan Department of Community Health and Michigan Department of Education for his leadership and guidance provided to the Michigan School Nurse Task Force. (November, 2011)

- Completed the annual audit report which was conducted by an outside CPA firm. The report showed the health department was in good financial standing, having no findings cited and a healthy fund balance. (February, 2012)

- identified need to improve WIC accessibility for women who live in Sturgis and collaborated with St. Joseph Head Start program to establish a WIC Satellite Clinic at Holy Angels Catholic School on Fridays. Space costs are donated by St. Joseph Head Start and Holy Angels Catholic Church. (March, 2012)

- Candy Cox, Agency's Clinic Manager, was recognized as Branch County Chamber of County's 2012 Citizen of the Year for providing 35 years of service to her community. Candy was recognized for her efforts to provide affordable CPR education and her dedicated volunteerism to various Christian service organizations. (March, 2012)

- Participated in state review of the District's Strategic National Stockpile Plan which was conducted by the Michigan Department of Community Health in order to measure compliance with the federal TAR tool. Received a 98% as the Agency's final score. (March, 2012)

- Applied and received approval to be a Maternal Infant Health Program (MIHP) provider by the Michigan Department of Community Health for Hillsdale and St. Joseph Counties. MIHP is an infant mortality initiative designed to improve prenatal and infant care for women and infants receiving Medicaid insurance. (April, 2012)

- Collaborated with Michigan Department of Community Health's Oral Health Program to provide an educational seminar to 30 area dental health professionals who earned two free continuing education credits for their participation. (April, 2012)

- Applied and received $5,000 grant from the Office of Highway Safety on behalf of Safe Kids Coalition to offer a Car Passenger Seat Training to increase the number of certified technicians in the area. As a result of the training, sixteen people were certified as Car Passenger Seat Technicians. (May, 2012)

- Established car seat fitting stations in Agency's WIC Clinics. As are result, Agency was able to request 100 car seats free of charge from Office of Highway Safety and Planning, with an estimated value of $4,700. (May, 2012)

- Investigated an outbreak of Cryptosporidium among area firefighters which occurred during a fire response at a Branch County dairy farm. The investigation crossed both county and state lines and involved many staff from several agencies including: agency prevention staff, agency environmental health staff, MDCH epidemiologists, Michigan State University, Indiana State Health Department and the CDC. The outbreak was successfully resolved. The outbreak was a featured presentation at MDCH's 12th Annual Communicable Disease Conference and articles published in recent issues of the Journal of American Medical Association publication (JAMA) and the CDC's Morbidity/Mortality Weekly Review (MMWR). (May, 2012)

- Collaborated with Michigan State University Extension offices to offer an educational class to local WIC mothers who are participating in Project Fresh. Through the class, participants learn how to select, clean, store and prepare fresh produce in order to improve their families' nutritional consumption, while saving money. (June, 2012)

- Completed the Michigan Local Public Health Accreditation Program's site evaluation for Cycle 5 which was conducted by the Michigan Departments of Community Health, Rural and Agricultural Development and Environmental Quality. The Agency met all 123 applicable essential indicators and 13 important indicators, including the optional Quality Improvement Section. As a result, the health department has been designated as fully accredited agency with commendation. (June, 2012)

M. Swain #6 of 6

Michigan Street Corridor Plan:
A Health Impact Assessment

December 2012

Prepared for

City of Grand Rapids Planning Department
Grand Rapids, Michigan

Prepared by

Public Sector Consultants Inc.
Lansing, Michigan
www.pscinc.com

This report was supported by a grant from the Michigan Department of Community Health Division of Environmental Health, Climate and Health Adaptation Program. The funds were made available to the state by the Centers for Disease Control and Prevention (CDC) Climate Ready States and Cities Initiative.

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Michigan Street Corridor Steering Committee

City of Grand Rapids
Congregation Ahavas Israel
Consumers Energy
Disability Advocates of Kent County
Dyer-Ives Foundation
Frey Foundation
Fulton Heights Neighborhood Association
Grand Action
Grand Rapids Community College
Grand Rapids Community Foundation
Grand Rapids Public Schools
Grand Valley Metropolitan Council
Grand Valley State University
Greater Grand Rapids Bicycle Coalition
Kent County Health Department
Michigan Department of Transportation
Michigan State Housing Development Authority
Michigan Oaks Neighborhood
Michigan State University College of Human Medicine
Michigan Street Corridor Association
Midtown Neighborhood Association
Neighbors of Belknap Lookout
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Contents

Introduction

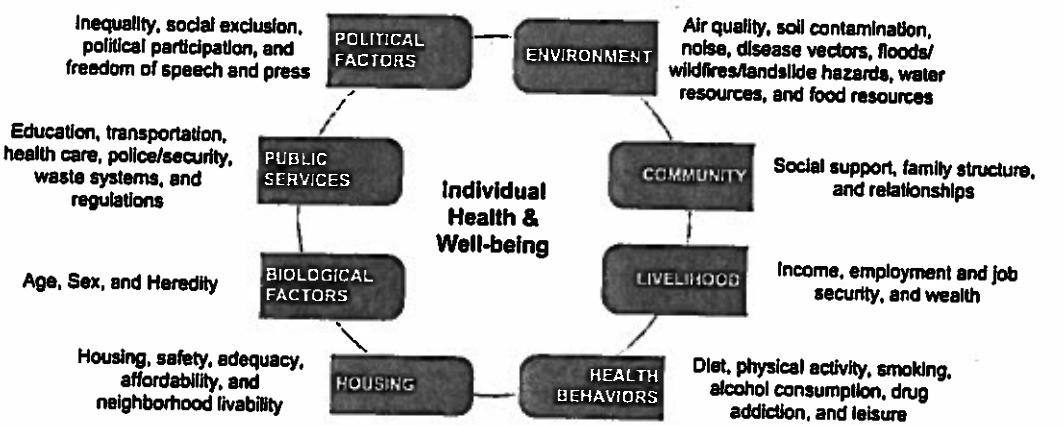
The purpose of this Health Impact Assessment (HIA) is to examine the potential health benefits and risks associated with development alternatives for the Michigan Street Corridor Plan (MSCP), a multi-year, comprehensive effort to plan for continued investment and growth in the Michigan Street Corridor of downtown Grand Rapids.

WHAT IS A HEALTH IMPACT ASSESSMENT?

An HIA is a "means of assessing the health impacts of policies, plans, and projects in diverse economic sectors using quantitative, qualitative, and participatory techniques" (WHO 2012). HIAs can help decision makers evaluate alternative scenarios and better understand ways to prevent disease, injury, and disparities, and improve public health.

A growing body of evidence demonstrates that an individual's state of health is much more than just a byproduct of biological factors and medical care. There are many factors, or determinants, of individual health and well-being (see Exhibit 1). Various HIAs have examined the impacts of plans or policies in the areas of transportation, land-use, food and agriculture, climate adaptation, housing, education, and income, among others, on the health of individuals and communities. By exploring the relationship between policies and health, decision makers can better understand the broader impacts of their proposed actions, modify programs as needed, and prioritize investments.

EXHIBIT 1. General Determinants of Health and Well-being



SOURCE: Adapted from: R. Bhatia, *Health Impact Assessment: A Guide for Practice*. Human Impact Partners, Oakland, Cal., 2011.

WHY AN HIA FOR THE MICHIGAN STREET CORRIDOR?

The Michigan Street Corridor has seen substantial growth and economic investment over the last decade; almost $1 billion worth of investment from major institutions that represent more than half of the downtown workforce. In response to projections for continued growth in the corridor, the City of Grand Rapids began the MSCP process in fall 2011 to plan for the next billion dollars of investment along the corridor with funding from nearly 20 community partners, including a Sustainable Communities

Challenge grant from the U.S. Department of Housing & Urban Development. Overseen by a 30-member Steering Committee, the goal of the MSCP is to:

> Create a form-based code, identify locations for new mixed-use development, devise a comprehensive transportation strategy, recognize affordable housing opportunities, and develop a housing investment program to increase the number of employees, students, and faculty living in and around the Michigan Street corridor while also assuring the creation and/or preservation of affordable housing within the area to ensure that Grand Rapids is a livable and sustainable community (City of Grand Rapids N.d.)

Health considerations were raised by the Steering Committee and stakeholders early in the process as an important consideration in developing Plan alternatives. This HIA will help the City, and its public and private partners who will be implementing selected alternatives, understand how choices related to land use, housing, transportation, infrastructure investment, and growth impact the health and well-being of residents and visitors in the corridor.

METHODOLOGY

An HIA generally consists of six steps:

1. **Screening.** Identify projects or policies for which an HIA would be useful, and determine which aspects of the policy or program to evaluate.
2. **Scoping:** Determine which health effects to consider and develop a map of pathways to describe relationships between inputs and outputs (for example, the impact of x on y).
3. **Assessment:** Identify the appropriate and necessary data sources and methods that will be used to quantify and describe current or existing conditions. Use available data, resources, and literature to describe the predicted health impacts.
4. **Recommendations:** Develop evidence-based recommendations to mitigate negative and maximize positive health impacts. Prioritize recommendations based on feedback from experts, the community, and stakeholders.
5. **Reporting:** Develop the HIA report and present findings and recommendations to relevant stakeholders, interested parties, and decision makers.
6. **Monitoring:** Monitor the decisions, implementation, health determinants, and outcomes affected by the assessment.

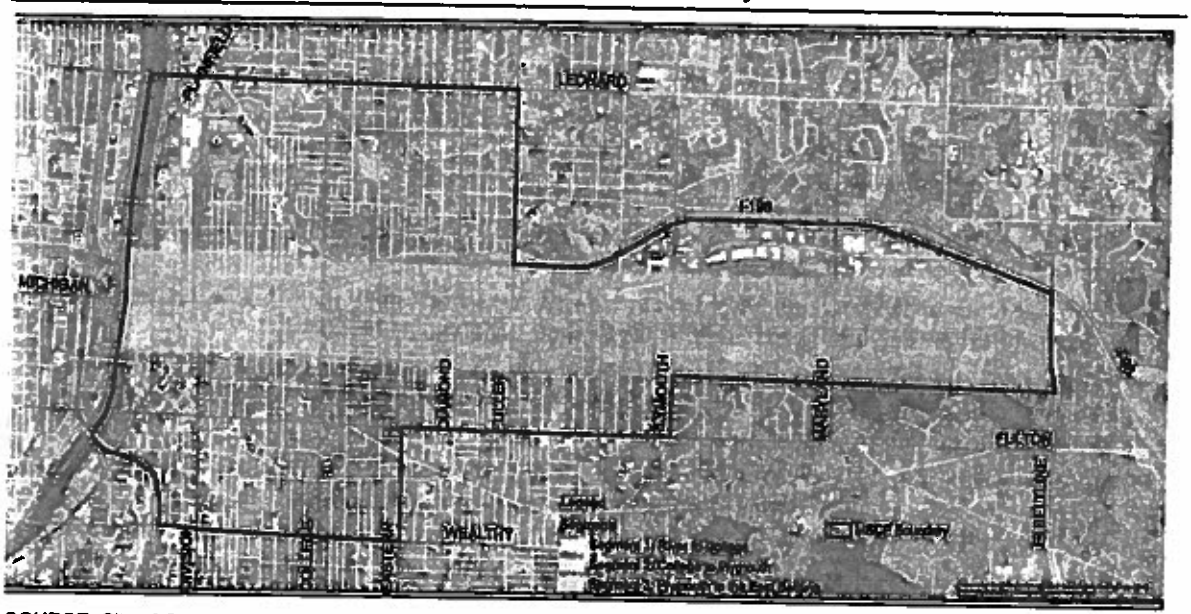
This report addresses steps one through five. Once the recommendations from this report and the MSCP preferred scenario alternatives are implemented, the City of Grand Rapids will monitor health impacts and outcomes associated with the project.

Overview of the Michigan Street Corridor Plan

ABOUT THE STUDY AREA

The MSCP study area is a nearly a four-mile stretch along Michigan Street, from the Grand River to the East Beltline, between Leonard Street and Fulton Street on the north and south (see Exhibit 2). This area encompasses much of downtown Grand Rapids, the Medical Mile, the neighborhoods of Belknap Lookout and Highland Park north of Interstate-196, and the neighborhoods of Heartside, Heritage Hill, Midtown, Fulton Heights, East Hills, and Michigan Oaks south of the interstate.

EXHIBIT 2. Map of the Study Area



SOURCE: City of Grand Rapids 6/11/12.

The study area is home to six major anchor institutions: Spectrum Health, Michigan State University's College of Human Medicine, Grand Valley State University's Cook DeVos Center for Health Sciences, Saint Mary's Health Care, Grand Rapids Community College, and the VanAndel Institute. An anchor analysis in 2011 by U3 Ventures found that the institutions in and around the corridor are of "national and international significance as centers of employment, purchasers of goods and services, curators and generators of arts and culture, and drivers of development and commercial activity" (U3 Ventures, September 2011).

EXHIBIT 3. Michigan Street Medical Mile

Photo credit: mlive.com (www.mlive.com/business/west-michigan/index.ssf/2011/10/grand_rapids_examines_how_to_d.html)

The 3.36-square-mile study area accounts for 7 percent of all the land area of Grand Rapids. The study area population, however, is more than 10 percent of the city population. Based on 2010 Census data, the median age and education level within the corridor is similar to the whole city, but the median income is about 25 percent less than the citywide median. Corridor residents are also twice as likely to have no car and walk to work. The study area is less diverse than Grand Rapids as a whole, with a smaller percentage of African Americans and Hispanics. Almost three-quarters of corridor residents are white (73 percent), with about 16 percent African American and almost 10 percent Hispanic residents. Exhibit 4 summarizes the demographic character of the study area.

EXHIBIT 4. Study Area Demographics Compared to Greater Grand Rapids

Demographics	Study area	Grand Rapids
Square miles	3.36	45.28
Total population (Census 2010)	19,233	188,040
Population reporting one race	18,388	180,209
White	72.6%	64.6%
Black or African American	16.3%	20.9%
American Indian and Alaska Native	0.8%	0.7%
Asian	1.5%	1.9%
Native Hawaiian and other Pacific Islander	0.1%	0.1%
Hispanic population	9.6%	15.6%
Some other race	4.3%	7.7%
Median household income 2010 (ESRI)	$35,569	$47,496
Median age 2010 (ESRI)	30.9	31.9
% Associate's or higher degree (ESRI)	39%	35%
% of Workers 16+ who walked to work (Census 2000)	9%	4%
% of Households with no vehicle (Census 2000)	20%	12%

SOURCE: 2010 Census data gathered by Community Research Institute (CRI).

Grand Rapids is located in Kent County, and the county has a higher number of people who qualify for food assistance than the state average. Food insecurity is defined as the household-level economic and social condition of limited or uncertain access to adequate food, and the food insecurity rate is the percentage of the population that experienced food insecurity at some point during the year. The county food insecurity rate is 15.2 percent among adults and 24.2 percent among children, compared with 18.2 percent in Michigan, and 25.4 percent among Michigan children (MPHI 2011; Feeding America, 2011).

Although the county rate of food insecurity is slightly better than the state's, urban, low-income areas like the study area are more susceptible to food insecurity (Morland et al 2002).

The Michigan Street Corridor is well positioned for economic growth in coming years. U3 Ventures found that in 2010, there were a total of 1,179 new hires among all major institutions, or 6 percent employee growth. In total, these institutions employ roughly 20,000 people, of which only about 3 percent live in the Michigan Street Corridor study area. Employees who live in the study area are likely to be younger and have fewer years of work experience at employer institutions. Exhibit 10 shows the number of people employed or affiliated (such as students) with the major employer institutions in the corridor.

MSCP PROCESS AND ALTERNATIVES

This multi-year, comprehensive planning effort has focused heavily on engaging the public in and around the study area to help define a vision for the corridor and identify specific infrastructure and policy wants and needs. The process included four public forums and numerous focus groups which challenged the community to:

- Identify the things they would most like to have, see, or experience in the corridor over the next 15 years
- Provide feedback on choices, trade-offs, and priorities
- Review and provide input on specific plan alternatives and elements

The city further engaged the public through online forums and the deployment of the city-developed "Quality of Life" game. Modeled on the longstanding children's game "Life," the Quality of Life game had participants move their game pieces through the corridor/game board, identifying and selecting quality-of-life items they would like to see in each section (such as bus stops, grocery stores, parks, housing). The games were placed in public locations throughout the corridor, including coffee shops, libraries, and other public gathering spaces. Twenty-six board games were returned and 130 individuals participated in total. The most frequent additions to the Quality of Life board game included those listed in Exhibit 4.

EXHIBIT 5. Preferred Corridor Elements Identified in the "Quality of Life" Game

Infrastructure	Economy	Housing
Street trees (59)	Mixed-use (44)	Row houses (31)
Bike racks (52)	Retail store/restaurant (43)	Multifamily low-rise (25)
No on-street parking (35)	Grocery store (34)	Multifamily mid-rise (20)
Park/green space (29)	Transit (28)	Live/work unit (15)

SOURCE: City of Grand Rapids Planning Department Staff, 2012
NOTE: Numbers in parentheses are the number of people who selected each element.

Based on input from the Steering Committee and the public (through the mechanisms described above), the MSCP project team decided to create scenario alternatives (meaning visual and written depictions of potential future outcomes) for the Michigan Street corridor in three primary areas: land use, transportation, and green infrastructure.

- **Land Use.** The preferred land use plan for the corridor divides Michigan Street into three segments: Grand River to College; College to Plymouth; and Plymouth to the East Beltline. For each segment,

the public identified various land-use characteristics they would like to see. For example, priorities identified for the Grand River to College segment include commercial and retail mix, institutions, and high density housing. From College to Plymouth the public also prioritized commercial and retail mix, but preferred only medium density housing and fewer institutions. In the easternmost segment, from Plymouth to the Beltline, the priority was low-density housing, followed by commercial and retail mix. Additional parking was identified as the least desirable use of land east of College Avenue.

The preferred land use scenario for the corridor, depicted in Exhibit 5, includes expanded light manufacturing East of Fuller; additional transit hubs on Michigan and Leonard Streets; expanded mixed-use neighborhoods to Crescent Street; and green infrastructure/pedestrian way expansion.

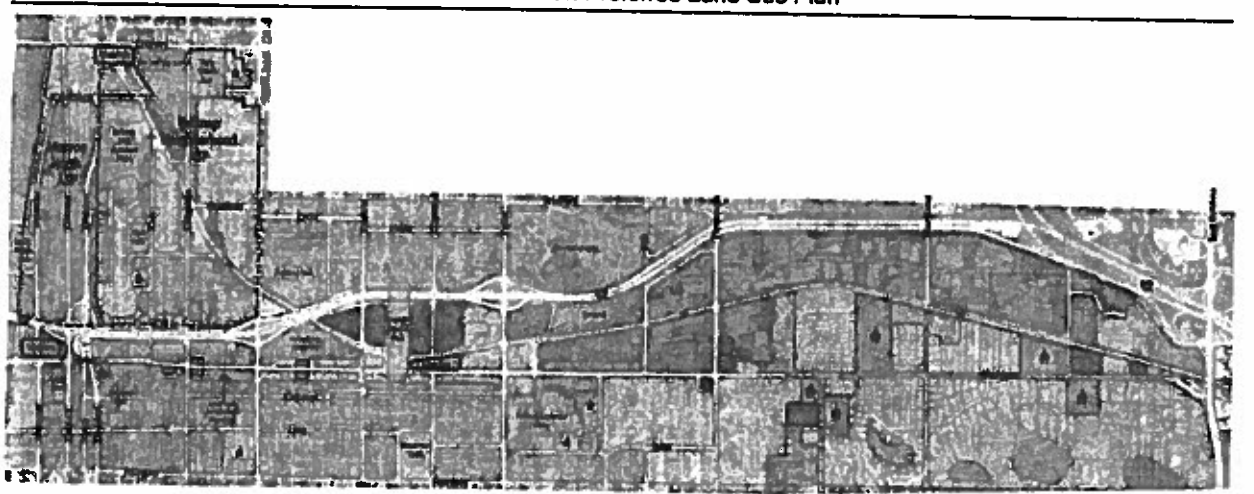
- **Transportation.** In order of increasing expense, the transportation alternatives the City has considered include bike routes, wider sidewalks and greenways, conversion of one-way streets to two-way, 5-to-3 lane conversion, reversible lanes, more turn lanes, medians, roundabouts at major intersections, rapid bus or transit improvements, and I-196 interstate modifications. Consultants from Smart Mobility Inc. used an MXD equation to ascertain the number of trips generated as a result of mixed-use development in the corridor. MXD calculates trip reduction rates as a combination of walk, bike, transit, and internal auto trips. The alternatives considered in the transportation analysis included no action; reconfiguration of the Ottawa ramp to I-196; converting Hastings and College to two-way roads between Lafayette and College and Lyon and Fountain; three-lane Michigan Street east of Mayfield; and adding 5,000 housing units to the greater downtown area. The results of the analysis predict a 10–15 percent reduction in trips in the corridor, which was not shown to significantly impact traffic congestion (Marshall 2012).

  The housing scenario Smart Mobility considered suggests relatively small traffic impacts, despite being four times the current forecast for total downtown housing in 2035. In other words, it's likely that auto trips will be shorter and other transportation modes, such as walking or biking, would be more common downtown. The impact on traffic congestion may not be significant downtown, but is likely to alleviate some regional congestion. Transportation demand management (TDM) programs will be considered in conjunction with any roadway reconfigurations. TDM programs typically increase the number and availability of more sustainable alternatives, incentivize more sustainable transportation habits, and use full-cost pricing on use of the personal automobile (Nelson 2000).

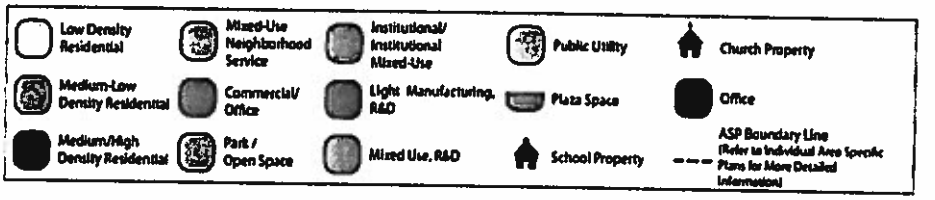
- **Green Infrastructure.** The draft green infrastructure and connectivity plan designates park/open space, bicycle routes, bicycle connections to Michigan Street, streetscapes, pedestrian connectors, and pedestrian enhancements on freeway bridges. There are bicycle routes planned south of the corridor along Crescent and Lyon Streets and six pedestrian bridge enhancements (City of Grand Rapids, October 29, 2012).

The City of Grand Rapids selected a preferred land use alternative in early fall 2012, and is in the process of modeling final transportation scenarios (see Exhibit 6). The City is evaluating the technical feasibility, and economic and environmental impacts associated with these development alternatives. This HIA complements the analysis by focusing on some of the potential health impacts of implementing these scenario alternatives.

EXHIBIT 6. Draft Preferred Land Use Plan



LEGEND



SOURCE: City of Grand Rapids, *Michigan Street Corridor Plan Draft Plan*, September 24, 2012.

SCREENING HEALTH IMPACT ASSESSMENT NEEDS

As the MSCP process got under way, the City recognized that proposed development alternatives must consider the health impacts associated with increased growth and economic and community infrastructure. Staff from the City's planning department met with Public Sector Consultants (PSC), the Kent County Health Department, and Grand Valley State University's Community Research Institute (CRI) to discuss whether an HIA would add value, and how it might inform decision makers regarding proposed corridor development alternatives. All agreed an HIA would be a worthy pursuit, and agreed to form a project team to lead the HIA and integrate the effort into the ongoing MSCP process. Exhibit 6 identifies the HIA Project Team roles and responsibilities. The project team sought and was awarded funding for the HIA from the Michigan Department of Community Health through its Climate and Health Adaptation Program.

EXHIBIT 7. Project Team Roles and Responsibilities

Partner	Role
City of Grand Rapids	The city planning department is the fiduciary for the HIA grant and supported HIA project activities by convening public forums, getting HIA input from the MSCP Steering Committee, and helping integrate HIA findings with the broader MSCP effort.
GVSU Community Research Institute	CRI staff attended project team meetings and participated in screening, scoping, and defining metrics. They also conducted research on data at the corridor level.
Kent County Health Department	The health department participated in project team meetings and contributed health data at local and county levels.
Public Sector Consultants	PSC scheduled, organized, and planned project meetings, and coordinated data collection among project team members. PSC also conducted the assessment and drafted the HIA report.
Michigan Street Corridor Plan Steering Committee	The Steering Committee was a sounding board for the HIA project team, and reviewed findings throughout the scoping, assessment, and recommendation phases of the project.

SOURCE: Public Sector Consultants Inc., 2012.

As the MSCP process was already under way, the HIA was folded into that process as much as possible so that the Project Team could tap the expertise of the MSCP Steering Committee and integrate public engagement efforts with the planned MSCP public meetings.

Because the proposed land use, transportation, and green infrastructure alternatives for the MSCP were still being developed, and the scope of the HIA needed to be defined somewhat narrowly to accommodate the grant time frame and budget, it was determined during screening that the HIA would evaluate health impacts associated with a few aspects of the scenario alternatives rather than trying to capture all possible development configurations for the corridor. Based on feedback from the MSCP Steering Committee and input at the first public forum, the Project Team decided to focus the HIA on the following project elements that could have significant public health issues:

- Pedestrian-friendly design, even at the expense of other transportation options
- Bike-friendly design, even at the expense of other transportation options
- Access to affordable fresh foods
- Reduction in vehicle emissions by providing alternative transportation options and sufficient tree canopy cover

SCOPING

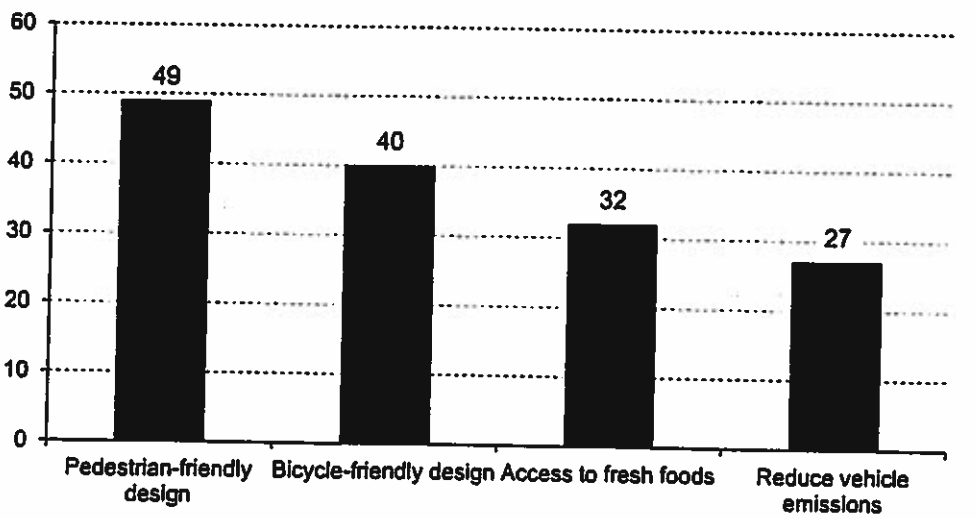
The scoping phase of this project established the framework for the HIA. In March 2012, the Project Team met to do a preliminary scoping of the major health issues in and around the Michigan Street Corridor. They also met with the MSCP Steering Committee to present and discuss the HIA process and potential health issues identified by the Project Team, and to answer questions from the committee.

The primary scoping mechanism to identify potential health issues was the second MSCP public forum in June 2012. This forum, titled "Discovery and Discussion," was designed to obtain input from the public on their values related to the three project scenario alternatives: transportation, land use, and green infrastructure, and the potential health issues associated with each of these scenario alternatives.

After a brief project overview, forum participants were invited to visit individual stations for each of these themes. The stations included further project details, and staff at each station solicited input from the public on their opinions and ideas related to these issues. At the public health station, PSC staff encouraged participants to rank the four scenario alternative elements included in the HIA in terms of their importance to improving or protecting health.

Using a scale of 1 to 4 (least to most important) 73 participants ranked the four HIA-focused plan elements. Results from the ranking exercise are shown in Exhibit 7.

EXHIBIT 8. Number of Participants who Ranked Elements as Moderate to High Priority



SOURCE: Public Sector Consultants Inc. 2012, based on survey sheets provided by forum participants.

As Exhibit 7 shows, more people value pedestrian-friendly design above all other aspects of development, followed by bike-friendly design. Pedestrian-friendly design also got the most "high priority" votes (28). Access to fresh foods had the second most "high priority" votes.

In addition to ranking elements, PSC staff also engaged forum participants in an interactive "health tree" exercise where they used Post-It notes to write down ideas about health indicators of concern (leaves of the tree), contributing behaviors (branches of the tree), and aspects of the environment that are possibly underlying causes for poor health (roots of the tree)

The major health indicators related to the four HIA-focused plan elements identified by participants included obesity, personal injury/public safety, and air quality and asthma. The personal injury indicator included everything from broken bones, to head injuries, to a sense of safety in general. Equity and access among socioeconomic groups and vulnerable populations was also raised as an important health issue. In this corridor in particular, equity and access for all is a key factor for each of the health indicators, and will be discussed in the assessments findings for each HIA-focused plan element. Exhibit 8 summarizes the feedback received.

EXHIBIT 9. Health Indicators, Contributing Behaviors, and Their Root Causes

	Health Indicator(s)	Behaviors	Root Causes	Related MSCP/HIA Plan Element
Equity and Access	Overweight and obesity	• Poor diet • Little walking • No bike-riding • Driving	• No food stores • Limited access to healthy food or restaurants • Few accessible drop-off points for GO! Bus • Few green spaces to walk to and/or enjoy • Few designated walking routes • Driving and parking are subsidized • Sidewalks are not plowed in winter • Some unappealing sidewalks/storefronts • Economic disparities	• Access to fresh food • Pedestrian-friendly design • Bicycle-friendly design
	Personal injury	• Jay-walking • Speeding cars/buses • Walking without shade	• Crosswalks are too far from MSU medical school parking lot • There are places in the corridor where walking doesn't feel safe • Bike lanes are not protected from cars • Poor awareness of walkers and bikers among motorists • Too few curb cuts for disabled individuals	• Pedestrian-friendly design • Bicycle-friendly design
	Asthma and heat-related illness	• Driving • Breathing carcinogens • Traffic congestion • Too much time in direct sun or heat • People with cars are given priority	• Lack of frequent mass transit and biking options • Use of Michigan St. as a highway on-and-off ramp • Lack of incentives to live and work in the community • Automobile dependency • Proximity to I-196 • Infrastructure caters to cars more than cyclists or pedestrians • Limited number of trees for shade • Urban heat island	• Reducing vehicle emissions • Pedestrian-friendly design • Bicycle-friendly design

SOURCE: PSC based on input from public scoping meeting participants.

Assessment Findings

The assessment of potential health impacts began with an evaluation of the existing conditions in the community and corridor. The Project Team assessed existing conditions by researching data on the three priority health indicators identified through scoping: overweight and obesity; personal injury; and asthma and heat-related illness, as well as equity and access conditions. Wherever possible, corridor or City of Grand Rapids data was used, but for some characteristics (particularly health information) the only data available are at the Kent County level. While we recognize there are differences between countywide data and city- or corridor-specific data, this HIA was based on the assumption that county data are sufficiently reflective of city or corridor data for the purposes of this analysis.

The Project Team then analyzed the potential impacts of the four HIA-focused plan alternatives on the three priority health indicators using existing literature and studies of similar types of projects. The findings of the assessment are presented below. Based on the results of the assessment, this HIA offers some broad recommendations for how the specific, preferred land use, transportation, and green infrastructure scenario alternatives could be implemented or modified to better protect the health and well-being of residents and visitors in the corridor.

OVERWEIGHT AND OBESITY

Current State of Overweight/Obesity Conditions and Contributing Factors

Overweight and obesity is a significant issue in Kent County as in the rest of the state and country. More than one-third of adults (35.4 percent) are overweight in Kent County, and almost another third (27.7 percent) are obese. About one in ten youth residents are obese (10.5 percent). Men and African Americans are more likely to be overweight than women and non-African Americans. About one in five adults (20 percent) are not physically active at all in their free time. Access to recreational facilities, which can play a role in managing and preventing obesity is slightly better than in the state as a whole, but is less than the national average; county residents have access to 12 recreational facilities per 100,000 people, compared with 10 in Michigan and 17 nationwide (MPHI 2011).

There are no data on number of bikes travelling in the corridor or on bike parking availability in the study area. There are no bike lanes along Michigan Street, although a bike route is planned along Lyon Street south of and parallel to Michigan Street. There are also wide shoulders along eastern parts of Michigan Street closer to the beltline, but no formal routes exist in the corridor.

Walkscore.com rates locations on their walkability and car dependence based on proximity to restaurants, coffee shops, bars, grocers, outdoor places, schools, and retail. The website gives the city of Grand Rapids a score of 54 out of 100, or "somewhat walkable." Neighborhoods within the study area have walkability scores that range from 31 (car-dependent) to 87 (very walkable) (Walkscore.com, October 2012).

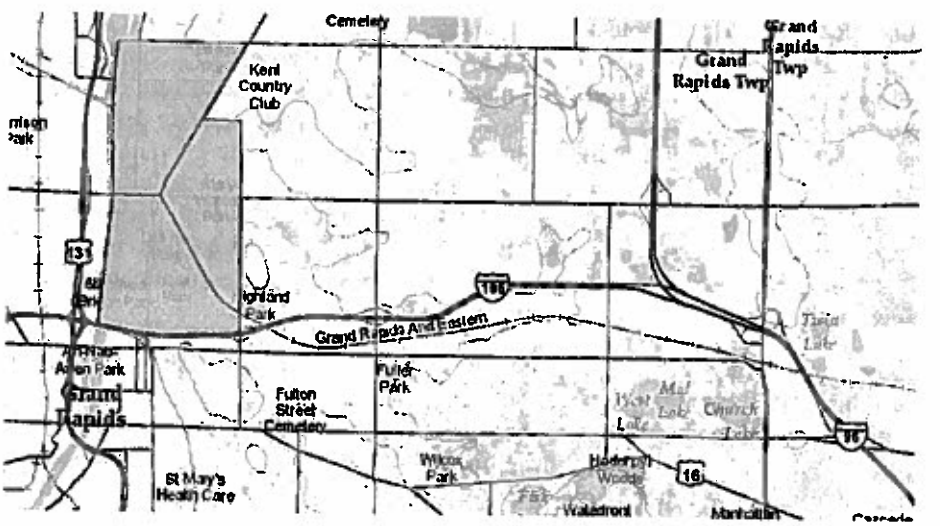
EXHIBIT 10: Walkability Scores of MSC and Surrounding Neighborhoods

Neighborhood	Walkability Score	Walkability Rating
Heartside	87	Very walkable
East Hills	76	Very walkable
Midtown	74	Very walkable
Heritage Hill	73	Very walkable
Belknap Lookout	69	Somewhat walkable
Fulton Heights	65	Somewhat walkable
Highland Park	53	Somewhat walkable
Northeast Citizens Action	39	Car-dependent
Michigan Oaks	31	Car-dependent

SOURCE: Walkscore.com, 2012.

Currently, the United States Department of Agriculture (USDA) identifies three census tracts in Grand Rapids as food deserts, meaning a low-income community with limited access to healthy and affordable food. There are 9,471 people living in the food desert on the northeast end of the corridor (see Exhibit 12). In the two tracts closest to the Michigan Street Corridor, residents are considered to have "low access," meaning at least 500 people and/or one-third of the tract population lives more than one mile from a supermarket or large grocery store. There are no major full-service grocery stores in the study area apart from value markets and neighborhood stores including Save-A-Lot, and two Family Fare locations on Leonard and Fulton.

EXHIBIT 11. Food Deserts in the Grand Rapids Area and Study Area



SOURCE: USDA Food Desert Locator, August 23, 2012.

Relationship between MSCP Plan Elements and Obesity/Overweight

As shown in Exhibit 8, incidence of overweight and obesity within the study area population is related to three of the four HIA-focused Plan elements: bike-friendly design, pedestrian-friendly design, and access to fresh foods. The relationships between these Plan elements and the obesity/overweight health indicator are described below.

Pedestrian and Bike-Friendly Design—Increasing Active Commuting in the Corridor

An assumption of the MSCP is that pedestrian- and bike-friendly design elements like wide sidewalks, sufficient and well-marked street crossings, speed calming devices, natural streetscapes and roadway buffers, bike lanes, and bike parking will all help to make the corridor a more welcoming environment for walkers and bikers, and encourage people to choose more active transportation modes rather than driving.

There is evidence that being physically active can help lower the risk of obesity, and in turn can lower risk for other chronic diseases. Physical activity plays a role in maintaining healthy levels of cholesterol (high-density lipoprotein cholesterol), triglycerides, blood pressure, waist circumference, and BMI, all of which are risk factors for cardiovascular disease. Active travel (walking and cycling) has been shown to be significantly related to lower levels of self-reported obesity and diabetes (Pucher et al. 2010). For each hour spent in a car per day the odds of obesity increased 6 percent; for each additional kilometer walked, odds decreased 4.8 percent (Frank et al. 2004). Related research has also shown that time spent being physically active while commuting is negatively associated with total cholesterol and diastolic blood pressure (Smith 2007).

When bike and pedestrian-friendly design are integrated into mixed, clustered, and transit-oriented land uses, there is even greater potential for reducing overweight conditions and obesity. A neighborhood with mixed residential and commercial uses, easy access to a variety of food and retail options, parks and open space, and good bike and pedestrian infrastructure can lead to more exercise and less obesity by significantly reducing the need to drive (Handy 1996; Frank et al. 2004; Cervero 1991). One study found that in six large suburban area centers, having a retail component within an office building reduced vehicle trip rates by 8 percent per employee (Cervero 1991). Another study in Atlanta demonstrated that people who live in walkable neighborhoods are twice as likely to meet the daily recommended moderate-intensity physical activity as those who don't (Frank 2005). Greater walkability is defined as having many walking destinations near home, a higher residential density, and a greater land-use mix (Trout 1993).

Bike- and pedestrian-friendly design elements can also help capitalize on opportunities for people to use public transit for commuting. Access to various modes of transportation, including public transit, provides health benefits by increasing physical activity through walking and biking to transit stations and expanding access to healthy foods. In fact, residents living near transit stations are five times more likely to commute via public transit than other residents in a region (Lund et al. 2004). Almost one-third of people using public transit to commute to work meet the daily recommended amount of physical activity (Besser and Dannenberg 2005).

Access to Fresh Food—Healthier Eating

Residents in low-income communities are less likely to own a car and are three times less likely to have a grocery store within their neighborhood than residents of more affluent communities. Non-

minority and wealthy communities typically have greater access to foods and dietary lifestyles that lower disease risk (Morland et al. 2002). Low-income and urban residents are more likely to shop at smaller local stores that typically carry less healthy food (including a lack of produce or nutritious foods) at higher prices (Morland et al. 2002; Williams and Collins 2001). For example, one study used a geospatial analysis in four states to compare the number of places to consume alcoholic beverages and the number of supermarkets in wealthy and low-income neighborhoods, and in white and minority neighborhoods. Low-income and minority neighborhoods had three times more places to consume alcohol and a much narrower selection of supermarkets with healthy food choices available (Morland et al. 2002).

Providing proximate access to fresh, healthy food outlets and ensuring sufficient transportation options to those locations can help address equity and access issues in low-income communities. Mapping food access (such as grocery stores and farmer's markets) and transportation assets can help identify transportation barriers for accessing fresh food. There are also opportunities to help locate grocers and farmer's markets at transit hubs (Vallianatos 2002).

FUN FACT: How many pounds of fat could a Grand Rapids resident burn if he/she biked to work each day?

Commuting from the beltline to downtown Grand Rapids via bike burns 344 calories a day, or 1 pound in 10 days. If someone commuted to work 260 days each year by bike they would burn **26 pounds.**

Calculation based on the following: Bicycling 8 miles round-trip at 12 to 13.9 mph is a "moderate effort," according to the Wisconsin Department of Health (State of Wisconsin 2005). This assumes a weight of 155lbs, and round-trip commute 260 work days per year.

FUN FACT: How many pounds of fat could a Grand Rapids resident burn if he/she walked to work each day?

If you live in Fulton Heights and walk to and from the Helen DeVos Pediatric Specialty Clinic each day, you can lose 1 pound in 11 days, or **24 pounds per year.**

Calculation based on the following: Walking 4 miles round-trip at a moderate speed of 3.0mph, and weight of 155lbs will burn 327 calories a day (State of Wisconsin 2005). People who weigh more are likely to burn more calories walking at the same speed.

PERSONAL INJURY

Current State of Personal Injury/Personal Safety and Contributing Factors

As in most cities in Michigan, personal injury from automobile accidents is a risk in Grand Rapids. From 2007 to 2011 there were 1,015 accidents in the study corridor, 736 of which were vehicle-to-vehicle, 141 vehicle-to-pedestrian, and 139 vehicle-to-bicyclist (City of Grand Rapids Traffic Engineering Division).

Public safety in Kent county is of significant importance to residents. The Kent County Citizen Survey showed that nearly all residents (95 percent) said public safety is an important aim of local government. This was more important than pollution control (91 percent), road maintenance (85 percent), and economic development programs (83 percent).

Relationship between MSCP Plan Elements and Personal Injury

Bike-friendly design and pedestrian-friendly design are related to the incidence of personal injury within the study area. The relationships between these Plan elements and the personal injury health indicator are described below.

Bike and Pedestrian-friendly Design—Safer Streets

Bike and pedestrian design elements that slow traffic, provide safe crossings, help decrease driver distraction, and help separate pedestrians, bikes, and vehicles can create safer streets and reduce the rate and severity of accidents. Traffic speed, street environment, and traffic volumes all impact the number and severity of traffic accidents and fatalities.

Studies generally indicate that trees and other streetscape improvements such as raised concrete planters, shrubs, decorative lights, noise barriers, flowers, or sculptures that buffer pedestrians from the roadway and separate bikes, walkers, and cars, provide safety and environmental benefit by encouraging lower driving speeds and creating a safer street environment for multimodal users. People (car drivers) generally perceive suburban streets with trees to be safer than urban streets with no trees, and both fast and slow drivers exercise slower driving speeds when trees are present. A study in Toronto demonstrated a reduction in mid-block accidents of between 5 and 20 percent when elements such as raised concrete planters, shrubs, decorative lights and medians, flowers, sculpture, trees, and entry markers and bollards are present (Naderi 2003). A study in Germany showed that similar landscape enhancements reduced overall accidents by 30 percent, and injuries and pedestrian collisions decreased at even greater percentages (Topp 1990). Having a well-defined edge separating streets and clear zones (or roadside border area) is important in decreasing off-road collisions with obstacles (Naderi 2003).

The total number of cars versus bikes and pedestrians on the street is also an influential factor in traffic and pedestrian accidents. Where traffic volumes are high, there is about 13 times greater risk for pedestrian injury among children than in areas with low traffic volumes (Jackson and Kochtitzky 2001). Some studies have shown that when there are more walkers and cyclists on sidewalks and roads, motorists are more likely to expect them and this lowers the likelihood of crashes (Jacobson 2003; Leden 2002).

Photo courtesy Association of Pedestrian and Bicycle Professionals.

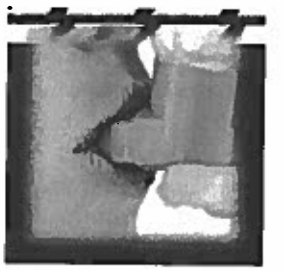
Finally, street and land use design that accommodates people with disabilities or other physical challenges can help reduce the number and severity of accident injuries. Again, this is particularly relevant in the Michigan Street Corridor given the large number of medical patients that visit the corridor each day. This presents an even greater need for pedestrian design that better accommodates all users. Studies show for example that areas without paved sidewalks have an 82.2 percent higher likelihood of being an accident crash site than those areas with a paved sidewalk. This is true even when accounting for overall volume of traffic and speed limits at the site (McMahon et al. 2002).

ASTHMA AND HEAT-RELATED ILLNESS

Current State of Asthma or Heat-Related Illness and Contributing Factors

About one in ten Kent County residents have ever been told they have asthma (12.2 percent), which is slightly less than Michigan's average (15.4 percent) (2008 Kent County BRFS). The rate

of asthma hospitalization from 2004 to 2006 in Kent county was 9.5 per 10,000 people, compared with the state rate of 16.6. The rate among blacks, however, was almost four times that of whites (25.6 versus 7.2 per 10,000) (Asthma Initiative of Michigan Nd).



The Michigan Department of Environmental Quality, in partnership with local health departments and other agencies, monitors air quality throughout the state. There are two primary pollutants that affect asthma—particulate matter and ground-level ozone. When levels of these pollutants are predicted to be unhealthy for sensitive groups or worse on the Air Quality Index, the state and its partners declare Action! Days. The greater Grand Rapids area has had 25 five Action! Days in 2012, and had eight Action! Days in 2011. This is comparable to the Detroit, Benton Harbor, and Ann Arbor areas, but well below Lansing and Kalamazoo, which have had one and two Action! Days, respectively, in 2012 (MDEQ, MIair 2012).

In 2010, traffic counts along Michigan Street from Ottawa to Mayfield ranged from approximately 14,000 to 22,000 vehicles per day. Most traffic is focused in the central area of the corridor between North Avenue and Sinclair Street near the I-196 interchange at College Ave. There is public transit via the Rapid bus system that covers sections of Michigan Street (routes 13,19,and 14), but routes serve a very limited distance along the corridor.

In the downtown Grand Rapids area, the tree canopy is between 4 and 25 percent. Moving east along the Michigan Street Corridor, the tree cover increases to 35 percent and eventually up to 46 percent at the far east end of the corridor. As Exhibit 13 shows, neighborhoods with the lowest percentages of canopy include Heartside and Belknap Lookout (Vande Bunte, February 6, 2012). Sun burn, heat exposure, and heat-related illness are associated with a lack of tree canopy in urban areas.

Relationship between MSCP Plan Elements and Asthma or Heat-Related Illness

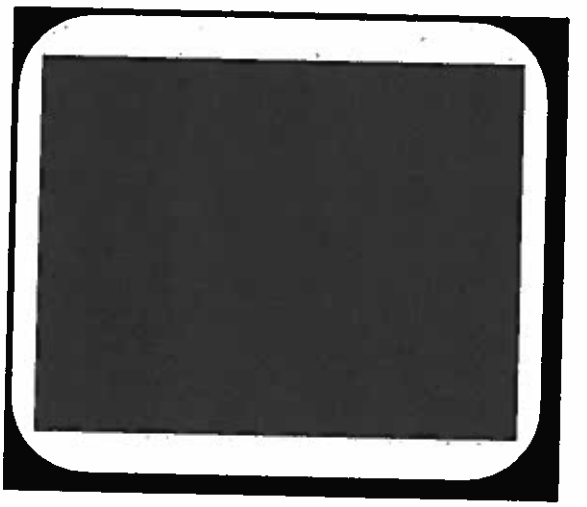
The incidence of asthma, respiratory disease, and heat related illness among the study area population is related to bike-friendly design, pedestrian-friendly design, and vehicle emissions. The relationships between these Plan elements and the asthma and air quality health indicator are described below.

Asthma and heat related illness can be impacted by emissions of air pollutants from vehicles in the corridor. Vehicle emissions can be reduced through greater use of public transportation and ride sharing, as well as increased use of non-motorized transportation modes such as walking and biking. Therefore, this health indicator also considers the relationship between bike and pedestrian-friendly design Lack of shade and extreme temperatures can cause heat-related illness and risk as well. These could be particular issues in the study corridor given the large vulnerable population of health/medical patient visitors each day.

Vehicle Emissions—Healthier Air

Vehicles emit air pollutants such as particulate matter, carbon monoxide, volatile organic compounds and oxides of nitrogen that can impact asthma. Air pollution from roadways is responsible for millions of respiratory-related restricted activity days, (most of which can be attributed to particulate matter alone), headaches, chronic respiratory illness, cancer, and premature death (McCubbin 1995, Jackson and Kochtitzky 2001). "Motor vehicle air quality impacts result in 50-70 million days of restricted levels of activity; 20,000-46,000 cases of chronic respiratory illness; 40,000 premature deaths" (EPA 2001, p. 28).

This is a particular issue for vulnerable populations, such as children and low income communities. Asthma is the leading chronic condition among children in the United States, and it is estimated that in 2010, seven million children 17 years of age and under currently have asthma (Moorman et al. 2012). The East Bay Children's Respiratory Health Study showed that California school children living within 75 meters of a major road had an increased risk of lifetime asthma, prevalent asthma, and wheezing. Even in areas with good regional air quality, local air pollution from nearby traffic may be associated with risks to children's respiratory health (Kim et al. 2004).



Land-use and transportation policies often do not protect children or other high-risk populations from air pollution associated with traffic from automobiles and proximity to high-volume roadways. Minorities and low-income communities typically inherit the risks associated with poor land-use policy due to their lack of educated leaders, political power, and financial resources to afford housing in more desirable areas (Rhodes 2003).

Land use that promotes proximity between housing and jobs, such as the housing infrastructure and incentive elements of the MSCP, has been shown to reduce vehicle miles traveled. Cervero and Duncan found that access to jobs (closer proximity within a 4 mile radius) has been shown to more effectively reduce vehicle miles traveled and vehicle hours traveled almost 88 percent more than access to shopping and services, though both are associated with decreases in miles traveled and time spent traveling (Duncan and Cervero 2006).

As employment in the Michigan Street corridor grows, alternatives that create stronger jobs-housing balance could help address air pollution and associated health issues. Other communities have attempted to balance job and housing growth by shifting zoning from commercial to residential and mandating affordable housing. Palo Alto created a Below Market Rate (BMR) Program to require at least 10 percent of housing units of new developments of 10 or more units must be affordable to low- and moderate-income households (Duncan and Cervero 2006).

Tree Canopy—Cooler Temperatures, Cleaner Air

Urban heat islands can be a risk factor for heat-related illnesses, especially among vulnerable populations such as children and seniors. Heat islands can result from built up areas without shade, trees, soil, or plants available to absorb the sun's heat. Studies have shown that parks within cities can have cooler temperatures by 2 degrees Fahrenheit during the day. The larger the park, and the more trees it has, the greater the cooling effect (Bowler et al. 2010). Trees are able to filter pollutants, increase oxygen production, and reduce carbon dioxide. Tree canopies can provide natural shade, lower temperatures, alter emissions from building energy use, and reduce UV exposure and the risk of skin cancer. Research has shown that the increase in tree cover from none to some, versus some to a lot, is much more significant in decreasing exposure to UV-B rays (Grant et al. 2002; Nowak et al. 2010).

Tree cover can also help address air pollution-related asthma. A study in New York City demonstrated that children living in areas with more street trees have a lower prevalence of asthma compared with children living in areas with fewer trees (Lovasi et al. 2008). There is more research

needed to evaluate whether a causal relationship exists between the number of trees and asthma. This planning project in Grand Rapids presents an excellent opportunity to conduct a prospective evaluation of the impact on early childhood asthma. Planning for more green space and trees throughout the corridor can save money that would otherwise be spent on air pollution mitigation (City of Grand Rapids 2011). Landscaping with trees also makes economic sense, since property values and commercial benefits can increase. One study found that planting trees costs less than creating more energy efficient appliances or fuel-efficient cars. A pound of CO2 costs .3 to 1.3 cents per tree, 2.5 cents for energy efficiency; and 10 cents for fuel-efficient cars According to American Forests, a national nonprofit conservation organization, one acre of trees has the potential to use 2.6 tons of CO2 each year (Alaska Dept. of Natural Resources 1999).

Recommended Policies and Infrastructure Elements

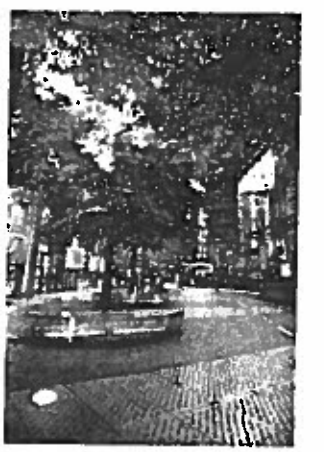
Based on the findings from the assessment, the land use, transportation, and green infrastructure scenario alternatives under consideration for the MSCP could provide some significant health benefits for people living in and visiting the corridor. While each of the proposed alternatives has various levels of health impacts, some plan elements offer greater opportunities than others.

The draft recommendations for the MSCP below were identified by PSC and the Steering Committee as those that are evidence-based, feasible, and likely to have the greatest positive impact on any one or more of the four priority health indicators.

- Accommodate all modes of transportation, and especially enhance mobility for individuals with disabilities. Streets should be for everyone. Use building codes and roadway designs that promote designs that accommodate people with compromised mobility and disabled community residents. This will allow for more participation among everyone in the community and will not isolate certain groups or populations.

- Along Michigan Street itself, ensure walkability over bikeability. As neighborhoods become less dense moving east from downtown, provide mid-block crossings for safe road-crossing. Surrounding neighborhoods may be the safest and most comfortable place for bicyclists, keeping them off arterial roads with speeding cars or congested traffic. This will ease stress and improve safety for bicyclists and drivers alike.

- Provide zoning and economic development incentives that attract one or more options for healthy food access in the corridor. This could include extended hours or facilities for the existing farmers market and/or helping to locate a full-size, full-service grocery store in the study area and closest to the northwest area of food insecurity.



- Prioritize investment in enhanced streetscapes and buffers that potentially provide multiple health benefits including improved traffic safety through lower speeds, reduced asthma and other local-air quality related conditions, lower heat-related illness, reduced stress and anxiety, and greater social connectivity. These may include but are not limited to trees, planters with flowers, sculpture, and street lights.

- Use land-use zoning codes that promote multi-use, transit oriented land-development to encourage walking and biking as forms of commuting to and from work, school, and shopping trips. Complement these approaches by forming partnerships with major employers to incent non-motorized transportation and/or corridor living among their employees.

- Ensure affordable housing in the corridor, particularly for those that work in the corridor that offers opportunities for individuals and families to reduce their need for automobiles and increase their active commuting.

- Promote visibility of walkers and bikers using wide sidewalks and mixed-use buildings with windows at the ground level to encourage shopping trips by foot or bike. Appropriate signage

for cycling routes and crosswalks for pedestrians can assist in way-finding and signal motorists to be aware of people traveling by non-motorized means.

Overall, the final corridor plan should be designed around people first, and automobiles second. Based on corridor resident preferences and the likely impacts of transportation, land-use, and housing infrastructure, we suggest all of the above recommendations be considered through a human experience perspective. By implementing these measures to improve health in the corridor in conjunction with its sustainability and development planning, the City of Grand Rapids will provide for a greater quality of life such that more people will want and be able to live, work, and play within the Michigan Street Corridor.

Monitoring

As the MSCP planning process continues, the HIA project team will be responsible for integrating HIA recommendations into the final selected scenario alternatives. As the plan moves into the implementation phase in the spring of 2013, the Project Team will assess which recommendations have been implemented and what the impacts are, if any, on the health metrics and indicators described in this report. This project has already increased awareness among the City of Grand Rapids, MSCP Steering Committee, and other stakeholders of the broader health implications of development scenario alternatives. This may lead the City, developers, and funders to ensure that health impacts are fully integrated into any future plans or projects in the Michigan Street Corridor or in Grand Rapids.

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Sarah Poole

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Testimony by:

Sarah Poole
American Heart Association, Midwest Affiliate
House Appropriations Subcommittee on Community Health
February 25, 2013

Chairman Lori and members of the committee, my name is Sarah Poole and I am here today on behalf of the volunteers and staff of the American Heart Association to express support for the funding of prevention programs and, more specifically, cardiovascular health funding as well as support for the expansion of Medicaid in our state.

Many of you have heard these statistics but they are so frightening that they bear repeating. Michigan ranks among the worst states in the nation for preventable cardiovascular disease risk factors such as high blood pressure, high blood cholesterol, obesity, and physical inactivity. Due to the high rate of preventable risk factors in our state, cardiovascular disease (CVD) is the No. 1 killer in Michigan, causing 1 in 3 deaths, and costing the state an estimated $8.9 billion annually. I would like to stress that many of the most significant risk factors for cardiovascular disease are often preventable if individuals have the right education and tools to make healthier choices.

I want to address the subject of MDCH funding for prevention and quality of care programs. Over the last several years, state and federal funding for these programs has been diminished to an alarming level despite on-going evidence that these programs work to both lower healthcare costs and save lives (see attached AHA statement on the value of primordial and primary prevention for cardiovascular disease). *Although the American Heart Association does not receive any state funding*, we work very closely with the Michigan Department of Community Health to leverage resources and opportunities that are available because of the department's state funding and the additional $1.9 million in federal funding that results from state matching dollars. This year, state funding for cardiovascular health programs (incorporating heart disease, stroke, obesity, physical activity and nutrition) was a meager $670,000. While some funding is better than no funding, dedicating a mere $670,000 toward prevention of cardiovascular disease and risk - our state's leader in healthcare costs and the leading cause of death - cannot continue if we truly wish to change the future of healthcare in the state and reduce costs. We must make a

more robust commitment in the coming years in order to see the rates of heart disease, stroke, diabetes, obesity, and hypertension reduced. As you make decisions about the MDCH Public Health budget, I hope you will consider this a priority.

I am also here today to express the American Heart Association's support for Medicaid expansion in Michigan. Medicaid is currently an important source of health insurance coverage for patients with heart disease and stroke and it will become an even more important source of coverage for currently uninsured adults with or at-risk for CVD. Life-saving and cost-reducing preventative and maintenance benefits would become newly available to the additional people who would qualify for Medicaid under expansion. What are some of the benefits we know exist for heart disease and stroke Medicaid beneficiaries? As compared to the uninsured, those covered by Medicaid who also have heart disease are twice as likely to take their medications appropriately and to have their high blood pressure controlled. In addition, those individuals with Medicaid are more likely to access preventative care services. In fact, they are 20% more likely to be checked for high cholesterol, a key risk factor for cardiovascular disease. If we don't cover these individuals through Medicaid expansion they will continue to wait for an emergency event – such as a heart attack or a stroke – to access care. The result will be increased healthcare costs and, indeed, the death of more grandparents, parents, sons and daughters.

We know that our state is not out of the woods and that you continue to have many difficult decisions to make regarding which programs to fund. The American Heart Association urges members of this committee and all state lawmakers to make public health and cardiovascular disease prevention a priority by funding MDCH programs that combat this leading cause of death and healthcare costs. Keep in mind the potential return on investment - just a 1% reduction in heart attacks would save more than $17 million healthcare dollars; a 1% reduction in strokes, almost $4 million. These savings are opportunities too good to miss.

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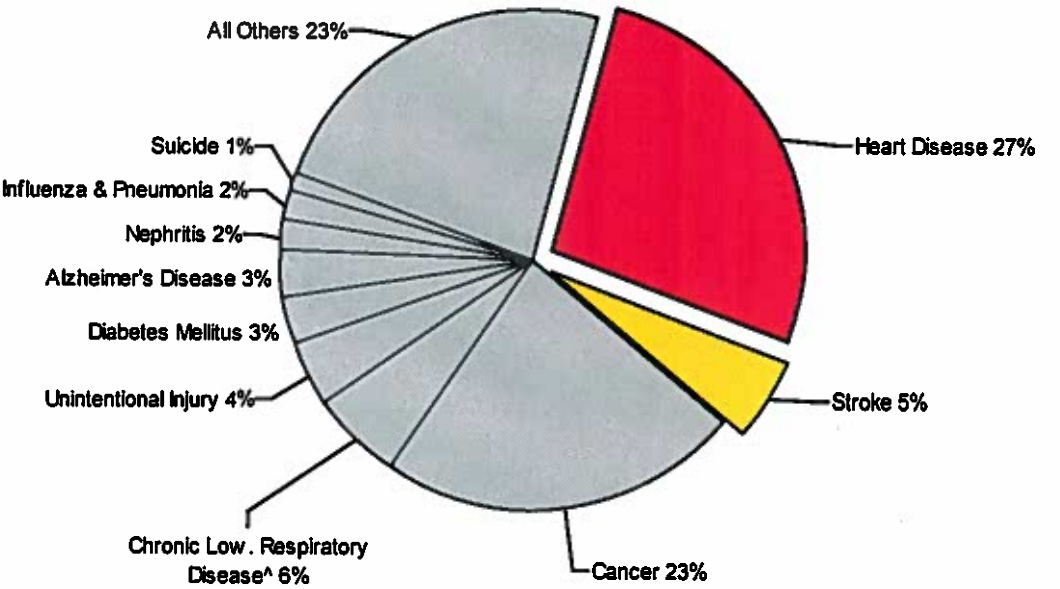
Michigan State Fact Sheet

Leading Causes of death in Michigan in 2009*



Michigan has the 11th highest death rate from cardiovascular disease in the country.**

- Heart disease is the No. 1 killer in Michigan*
- Stroke is the No. 4 killer in Michigan*
- 23,099 people in Michigan died of heart disease in 2009*
- 4,435 people in Michigan died of stroke in 2009*

Heart Disease and Stroke Risk Factors in Michigan

	Michigan	US
Adults who are current smokers	18.9%	17.3%
Adults who participated in a physical activity in the last month	76.4%	76%
Adults who are overweight or obese+	66.8%	63.8%
Adults who have been told that they have had a heart attack	4.9%	4.2%
Adults who have been told that they have had a stroke	2.9%	2.6%
Adults who have been told that they have angina or coronary heart disease	5.3%	4.1%
Population of adults (18-64) who have some kind of health care coverage	83.4%	82.1%
High school Students who are obese++	11.9%	12%

* List includes Puerto Rico and D.C. Based on total number of deaths in 2009. Centers for Disease Control and Prevention. WISQARS Leading Cause of Death Reports, 2009.
** Based on 2007 age-adjusted death rates. American Heart Association. Heart Disease and Stroke Statistics: 2012 Update. A Report from the American Heart Association. Circulation, Accessed January 20, 2012.
***Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System Survey, 2010.
□+ Overweight is defined as having a body mass index (BMI) of 25.0-29.9. Obese is defined as having a body mass index of 30.0 or more.
□□++ Students who were ≥ 95th percentile for body mass index, by age and sex. Centers for Disease Control and Prevention, Youth Risk Behavior Surveillance System, 2009.
^ Also known as COPD (Chronic Obstructive Pulmonary Disorder). COPD and allied conditions (including asthma); the term in the ICD/10 is "chronic lower respiratory diseases."

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FACTS

CRITICAL COVERAGE FOR HEART HEALTH:
Medicaid and Cardiovascular Disease

OVERVIEW
Medicaid is the nation's health insurance program for low-income Americans and is a vitally important part of our health care system. It covers many of the nation's poorest and sickest patients and provides a critical financing mechanism for the health care services these individuals receive – including care related to cardiovascular disease (CVD). In fact, more than 15 million adults with Medicaid coverage (53 percent) have a history of CVD.

In response to tight budgets, federal and state governments are considering a variety of approaches to reduce the growth of Federal and State Medicaid spending and give states more flexibility in how the program operates. The American Heart Association opposes policies that reduce access to, or significantly increase the cost of, necessary care for individuals with cardiovascular disease. Such proposals are at odds with the Association's first principle of health care reform, which states that "all residents of the United States should have meaningful, affordable healthcare coverage."

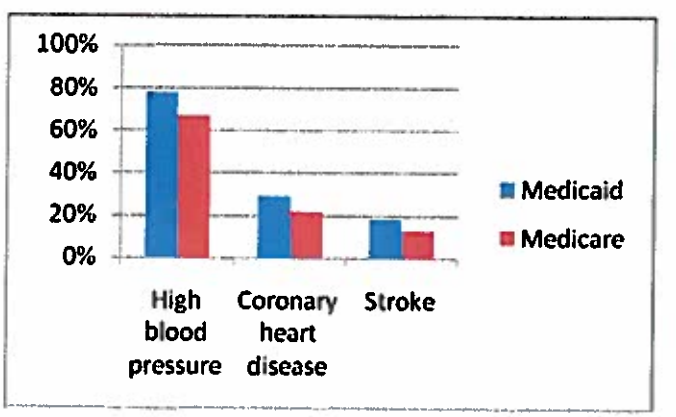
WHO IS ELIGIBLE FOR MEDICAID?
Medicaid provides coverage to approximately 58 million low-income Americans. This includes 29 million children, 15 million adults, nearly 9 million seniors and people with disabilities who also have Medicare coverage, and nearly 6 million low-income seniors and Individuals with disabilities. Many individuals with Medicaid coverage are also among the sickest and neediest individuals in our health care system. Indeed, those with chronic conditions – such as heart disease and stroke – are more likely to use acute care services, and are more likely to need nursing home or other long-term care.[1]

Under the 2010 Patient Protection and Affordable Care Act ("health care reform"), Medicaid eligibility will expand to cover uninsured individuals below 133 percent of the poverty level (approximately $11,000 In 2011 dollars) beginning in 2014. By 2019, Medicaid is expected to cover an additional 16 million individuals.[2]

WHAT DOES MEDICAID COVER?
Medicaid covers comprehensive care for children, and a wide range of acute and long-term care services for other enrollees. States are required to cover certain benefits, such as physician services, inpatient and outpatient hospital care, nursing home care, and may also choose to cover other categories of services, such as prescription drugs, dental care and rehabilitation. While states must cover long-term care services provided in a nursing facility, they may also cover long-term care services provided to a patient who continues to live at home.[3] Seven of 10 people living in nursing homes are covered by Medicaid.[4]

MEDICAID AND CVD
Medicaid provides an important safety net for approximately one-fifth of all Americans with cardiovascular disease,. A recent analysis of 2008 Medical Expenditure Panel Survey data shows that 53 percent of all adults with Medicaid coverage – more than 15 million individuals – have a history of some type of cardiovascular illness. This grows to nearly 91 percent of all individuals with Medicaid coverage who are over age 65.

Elderly Adults with History of CVD



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The most common health histories for Medicaid beneficiaries with CVD include:

- high blood pressure (40 percent of all Medicaid adults; 78 percent of elderly Medicaid adults);
- high cholesterol (32 percent of all Medicaid adults; 60 percent of elderly Medicaid adults);
- coronary heart disease (10 percent of all Medicaid adults; 29 percent of elderly Medicaid adults); and
- stroke (7.5 percent of all Medicaid adults; 18 percent of elderly Medicaid adults).[5]

Individuals with Medicaid coverage are more likely to have cardiovascular conditions than those who have other types of health insurance coverage. For example, low-income adults over age 65 with Medicaid coverage ("dual eligibles") are more likely to have a history of high blood pressure, coronary heart disease and stroke than seniors with only Medicare coverage. Similarly, individuals ages 18 to 64 with Medicaid coverage are more likely to have a history of high blood pressure, angina, heart attack, stroke or coronary heart disease than individuals with private health insurance.

These findings are consistent with the overall trend that individuals with Medicaid are generally sicker and have poorer health status than other Americans, highlighting how critical this coverage is for low-income Americans with CVD.

Medicaid provides important financial protection to low-income individuals with CVD, covering critical health services and ensuring that these services remain affordable. Out-of-pocket expenditures for older adults on Medicaid averaged $375 per person in 2008, compared to $1,455 for Medicare beneficiaries with no Medicaid coverage.

MEDICAID AND THE FEDERAL BUDGET

Medicaid is a shared responsibility between the federal government and the states. While states operate the program, make significant choices about coverage and who is eligible, the federal government establishes program parameters and matches state spending on health and long-term care services.

The Congressional Budget Office (CBO) currently projects that federal Medicaid spending will more than double in the next decade. This dramatic increase in federal support for health care services for lower-income Americans is driven by increases in health care spending, growing demand for long-term care as the Baby Boomers age and eligibility changes made by the new health care reform law, among other factors.

As policymakers work to improve the federal government's fiscal health and outlook, they will examine a variety of approaches to reduce the growth of federal Medicaid spending. There will also be pressure to give states increased flexibility. Proposals are likely to include: limits on federal spending through a block grant mechanism; requiring certain groups to enroll in managed care plans; repealing state "Maintenance of Effort" requirements; and capping the growth of federal health or overall spending (including Medicaid).[6]

IMPLICATIONS

Proposals that shift much of the risk for increases in Medicaid spending to the states could lead to changes in eligibility, covered benefits, or both. A CBO analysis of the House Republican budget proposal for FY2012 found that "the large projected reduction in payments would probably require states to decrease payments to Medicaid providers, reduce eligibility for Medicaid, provide less extensive coverage to beneficiaries, or pay more themselves than would be the case under current law."[7]

THE AHA ADVOCATES

We understand the significant budget challenges faced by both federal and state governments. However, the AHA will oppose proposals that reduce access to meaningful, affordable health care coverage for individuals with cardiovascular disease. These include policies that cause states to scale back eligibility, cut benefits, or significantly increase cost sharing for beneficiaries.

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[7] Congressional Budget Office. Letter to The Honorable Paul Ryan. April 5, 2011.

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AHA Policy Statement

Embargoed for 3pm CT/ 4pm ET, Monday, July 25, 2011

Value of Primordial and Primary Prevention for Cardiovascular Disease

A Policy Statement From the American Heart Association

William S. Weintraub, MD, FAHA, Chair; Stephen R. Daniels, MD, PhD, FAHA, Co-Chair; Lora E. Burke, PhD, MPH, FAHA; Barry A. Franklin, PhD, FAHA; David C. Goff, Jr, MD, PhD, FAHA; Laura L. Hayman, PhD, RN, FAHA; Donald Lloyd-Jones, MD, ScM, FAHA; Dilip K. Pandey, MBBS, PhD; Eduardo J. Sanchez, MD, MPH; Andrea Parsons Schram, DNP, CRNP; Laurie P. Whitsel, PhD; on behalf of the American Heart Association Advocacy Coordinating Committee, Council on Cardiovascular Disease in the Young, Council on the Kidney in Cardiovascular Disease, Council on Epidemiology and Prevention, Council on Cardiovascular Nursing, Council on Arteriosclerosis, Thrombosis and Vascular Biology, Council on Clinical Cardiology, and Stroke Council

Abstract—The process of atherosclerosis may begin in youth and continue for decades, leading to both nonfatal and fatal cardiovascular events, including myocardial infarction, stroke, and sudden death. With primordial and primary prevention, cardiovascular disease is largely preventable. Clinical trial evidence has shown convincingly that pharmacological treatment of risk factors can prevent events. The data are less definitive but also highly suggestive that appropriate public policy and lifestyle interventions aimed at eliminating tobacco use, limiting salt consumption, encouraging physical exercise, and improving diet can prevent events. There has been concern about whether efforts aimed at primordial and primary prevention provide value (ie, whether such interventions are worth what we pay for them). Although questions about the value of therapeutics for acute disease may be addressed by cost-effectiveness analysis, the long time frames involved in evaluating preventive interventions make cost-effectiveness analysis difficult and necessarily flawed. Nonetheless, cost-effectiveness analyses reviewed in this policy statement largely suggest that public policy, community efforts, and pharmacological intervention are all likely to be cost-effective and often cost saving compared with common benchmarks. The high direct medical care and indirect costs of cardiovascular disease—approaching $450 billion a year in 2010 and projected to rise to over $1 trillion a year by 2030—make this a critical medical and societal issue. Prevention of cardiovascular disease will also provide great value in developing a healthier, more productive society. (***Circulation***. 2011;124:00-00.)

Key Words: AHA Scientific Statements ■ cardiovascular diseases ■ prevention

Cardiovascular disease (CVD), including heart disease and stroke, is the leading cause of death and disability in women and men in the United States.[1] The preclinical substrates for clinical CVD (eg, fatty streaks and atherosclerosis) begin early in life and are influenced over time by potentially modifiable risk factors, behaviors, and environmental exposures. Favorable risk factor levels in middle age are associated with a lower lifetime risk for CVD mortality, increased survival, and improved quality of life.[2] Population-based and clinical studies highlight the importance of primordial prevention, defined

The American Heart Association makes every effort to avoid any actual or potential conflicts of interest that may arise as a result of an outside relationship or a personal, professional, or business interest of a member of the writing panel. Specifically, all members of the writing group are required to complete and submit a Disclosure Questionnaire showing all such relationships that might be perceived as real or potential conflicts of interest.

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herein as prevention of the development of risk factors in the first place,[3] and primary prevention, defined as interventions designed to modify adverse levels of risk factors once present with the goal of preventing an initial CVD event.[4,5] Recently, the passage of the Patient Protection and Affordable Care Act (PPACA) (public law 111–148) has focused the attention of policy makers, providers, and consumers on the value and cost savings/cost-effectiveness of life-course primordial and primary prevention strategies.[6]

Although it is clear and accepted from clinical trial data that prevention is efficacious (ie, that prevention works within the scope of the trial), it is less well accepted that preventive community interventions are effective and provide value (ie, that prevention will work in the community and is worth what we will pay for it). This statement summarizes the rationale and available evidence that support a life-course approach to primordial and primary prevention, as well as the cost-effectiveness (ie, value) of, multilevel policy implications for, and fertile areas for future research of preventive intervention. A primer on cost-effectiveness is provided as an Appendix. Common terms used in cost-effectiveness analysis are defined in Table 1. Table 2 provides a summary of the various cost-savings/cost-effectiveness data for various primordial or primary prevention initiatives reviewed in this statement.

T1,AQ:4, T2

AQ:5

Rationale for Life-Course Approach to Primordial and Primary Prevention

The life course is generally divided into 5 stages: fetal development and the maternal environment, infancy and childhood, adolescence, adulthood, and older age.[29] Although these stages are distinctly identified, they merge into one another, and influences during each life stage can have subsequent impact throughout the course of life. Disturbing trends for chronic disease and conditions like obesity and diabetes mellitus are emerging in which the incidence rates not only are increasing but also are affecting people at an earlier age.[29] These trends highlight the important need for primordial and primary prevention across the lifespan. Prevention efforts targeted at one point during the life course may have a lasting impact later in life or even from one generation to the next. For example, smoking cessation programs targeted at pregnant mothers can influence not only maternal health but also fetal health and infant and childhood well-being, including the incidence of ear infections, asthma, sudden infant death syndrome, and respiratory infections.

No multidecade, population-based, longitudinal studies have been conducted linking absolute levels of risk factors in childhood to incident clinical CVD events in adult life. Moreover, no randomized clinical trials have demonstrated that reduction of risk factor levels in childhood prevents cardiovascular events in adult life. Such studies are difficult to undertake in light of the large sample sizes, multidecade follow-up, and costs of long-term interventions and monitoring that would be required. Large cohort studies are possible; in particular, the National Children's Study is just getting underway (in 2011). It will examine the effects of the environment, defined broadly, and genetics on the growth, development, and health of children across the United States.[30] The study will follow the cohort from before birth to 21 years of age and will contribute to an understanding of the role that various factors have on health and disease.

Table 1. Glossary of Terms in an Economic Analysis

Term	Definition
Cost-effectiveness analysis	A formal approach to assessing value in which the effectiveness and costs of a medical service are compared with a previous standard
Direct costs	Costs directly related to medical care provided such as the cost of a diagnostic test or a medication
Indirect costs	Costs that are incurred as a result of illness but not actually part of the medical service; lost income from missing time at work is a common example
Average costs	All costs related to a medical service, including both fixed and marginal costs
Fixed costs	Costs that will be spent regardless of the number of services, including the cost of developing the facility
Marginal cost	The cost of the next service of a particular type such as the next stress test, including the cost of equipment or pharmaceuticals that are used only once; the cost of a coronary stent would be a marginal cost
Utility	Overall evaluation of health status, generally with 1 meaning optimal health and functioning and 0 being death
QALYs	QALYs are calculated by multiplying survival by utility; if a patient is expected to live for 10 y at 0.8 utility, this would be 8 QALYs; QALYs are often used as a measure of effectiveness when calculating an ICER
ICER	An ICER is the most common measure of cost-effectiveness; cost-effectiveness always compares one service with another such as a new treatment for hypertension compared with the previous standard; the ICER is calculated by first determining the incremental cost-effectiveness of the new therapy compared with the standard; the ICER is then the incremental cost divided by the incremental effectiveness
Willingness-to-pay threshold	The amount of money that an individual or group of individuals will pay for a medical service; an ICER below the threshold would be considered cost-effective, whereas an ICER above the threshold is not cost-effective
Discounting	Both future cost and survival are generally discounted, which means that people value cost over a 1-y period or 1 y of survival at the present time more than costs or 1 y of survival in the future; thus, with a discount rate of 3%, next year's costs or survival is 3% less important than this year's costs or survival

QALY indicates quality-adjusted life-years; ICER, incremental cost and incremental effectiveness ratio.

Several lines of evidence support the need for and value of primordial and primary prevention beginning early in life. This evidence base includes pathology studies of child and adolescent decedents that demonstrate that the extent of atherosclerotic vascular change is associated with the number and intensity of premortem modifiable risk factors and behaviors.[31–33] Further evidence comes from noninvasive imaging studies demonstrating that adverse levels of major risk factors for CVD measured in childhood and adolescence are associated with a prognostically significant early indicator of subclinical atherosclerosis, increased carotid intima-media

Table 2. Summary of Cost Savings or Value for Key Primordial and Primary Prevention Strategies in the United States

Intervention	Primordial or Primary Prevention	Cost Savings/Value	Source
Comprehensive prevention programs			
Community-based programs to increase physical activity, to improve nutrition, and to prevent smoking and other tobacco use	Primordial	A return on investment of $5.60 for every $1 spent within 5 y	7
Comprehensive worksite wellness programs	Primordial and primary	Within first 12 to 18 mo, medical costs fall by approximately $3.27 for every $1 spent on worksite wellness; absenteeism costs fall by about $2.73 for every $1 spent	8
Comprehensive school-based initiatives to promote healthy eating and physical activity	Primordial	Cost-effectiveness is $900–$4305 per QALY saved	9, 10
Physical activity			
Building bike and pedestrian trails	Primordial and primary	Nearly $3 in medical cost savings is seen for every $1 invested in building these trails	11
Physical activity interventions such as pedometer and walking programs	Primordial and primary	ICERs ranging from $14 000–$69 000 per QALY gained relative to no intervention, especially in high-risk groups	12–14
Diet/nutrition			
Reducing sodium in the food supply	Primordial and primary	It is estimated that reducing population sodium intake to 1500 mg/d would result in $26.2 billion in healthcare savings annually	15
Obesity prevention			
Obesity management program	Primary	1-y interventions have shown reduction in risk categories such as poor eating and poor physical activity habits and in weight for a return on investment of $1.17 for every $1 spent	16
Tobacco control and prevention			
Excise taxes	Primary	A 40% tax-induced cigarette price increase would reduce smoking prevalence to 15.2% by 2025 with large gains in cumulative life-years (7 million) and QALYs (13 million) for a total cost savings of $682 billion	17
Comprehensive smoke-free air laws in public buildings	Primordial	Eliminating exposure to second-hand smoke would save an estimated $10 billion annually in direct and indirect healthcare costs	18
Tobacco cessation programs	Primary	ICERs for treatment programs range from a few hundred to a few thousand dollars per QALY saved	19
Comprehensive coverage for tobacco cessation programs in Medicaid programs	Primary	Comprehensive coverage led to reduced hospitalizations for heart attacks and a net savings of $10.5 million or a $3.07 return on investment for every $1 spent; states offering comprehensive smoking cessation therapy to their employees or in their tobacco control and prevention programs save $1.10–$1.40 in healthcare expenditures and productivity for every $1 spent	20, 21
Tobacco cessation programs for pregnant women	Primary for mother; primordial for fetus	These programs produce a cost-to-benefit ratio as high as 3:1 (ie, for every $1 invested in cessation/relapse programs, $3 are saved in downstream health-related costs)	22
Diabetes prevention			
Diabetes screening	Primordial	Targeted screening for T2DM based on age and risk was found to be far more cost-effective (ICERs ranging from $46 800–$70 500 per QALY gained) compared with universal screening (ICERs from $70 100–$982 000 per QALY gained); targeted screening for undiagnosed T2DM in blacks between 45 and 54 y of age was found to be the most cost-effective with an ICER of $19 600 per QALY gained relative to no screening	23, 24
Lifestyle changes in diabetes prevention	Primary	Lifestyle changes reduced the incidence of diabetes mellitus by 58%, whereas metformin therapy reduced risk by 31%; in patients with impaired glucose tolerance, primary prevention in the form of intensive lifestyle modification has median ICERs of $1500 per QALY gained	23, 25
Cholesterol screening and prevention			
Widespread use of statins	Primary	Full adherence to ATP III primary prevention guidelines would prevent 20 000 myocardial infarctions and 10 000 CVD deaths at a total cost $3.6 billion or $42 000 per QALY if low-intensity statins cost $2.11 per pill (which is substantially higher than the cost of currently available, effective generic statins); at a $50 000 willingness-to-pay threshold, statins are cost-effective up to $2.21 per pill	26
Blood pressure			
Hypertension medication therapy	Primary	Approximate $37 100 cost per life-year saved	27
Polypill administration	Primary	Polypill medication treatment in men was less expensive and more effective, with an average cost of $70 000 compared with $93 000 for no treatment, and resulted in 13.62 QALYs compared with 12.96 QALYs without treatment	28

QALY indicates quality-adjusted life-years; ICER, incremental cost and incremental effectiveness ratio; T2DM, type 2 diabetes mellitus; ATP III, Adult Treatment Panel III; and CVD, cardiovascular disease.

thickness, in adulthood.[34–37] Results from a population-based prospective cohort study, the Young Finns Study, are particularly noteworthy because risk factor exposures (including low-density lipoprotein cholesterol [LDL-C], body mass index, cigarette smoking, and systolic blood pressure) in 12- to 18-year-old adolescents predicted increased carotid intima-media thickness in adulthood independently of the risk factors for CVD present in adulthood.[32] More recently, in a cross-sectional comparative study of lean and obese children and youth with type 2 diabetes mellitus (T2DM), those with T2DM had significantly greater carotid intima-media thickness and stiffer carotid arteries than their leaner counterparts.[38] The presence of either T2DM or obesity contributed independently to adverse changes in carotid structure and function.[38] Moreover, a combined data analysis from 4 cohorts comprising 4380 patients showed that risk factors from 9 years of age were predictive of carotid intima-media thickness in adulthood.[39]

Additional evidence supporting the need for primordial and primary prevention beginning early in life comes from population-based epidemiological studies indicating that major risk factors for and adverse health behaviors associated with CVD in adulthood, including cigarette smoking, dyslipidemia (high levels of LDL-C and low levels of cardioprotective high-density lipoprotein cholesterol), elevated blood pressure, physical inactivity, and obesity, are prevalent in childhood and adolescence[1,40–42] and are potentially modifiable.[43,44] The US Surgeon General's office reported that "overweight adolescents have a 70% chance of becoming overweight or obese adults. This increases to 80% if one or more parent is overweight or obese. Overweight or obese adults are at risk for a number of health problems including CVD, T2DM, high blood pressure, and some forms of cancer."[45] Tracking of risk factors from childhood to young adulthood and intraindividual clustering of risk factors and adverse health behaviors have been well documented in clinical and population-based studies in the United States and globally.[46–48] Finally, the efficacy and safety of modifying major CVD risk factors in early life with therapeutic lifestyle change and, although data on safety are more limited, the efficacy of pharmacological interventions have also been demonstrated.[49–53] More data in large populations are needed to establish the safety of pharmacological therapy begun in the young and continued long term.

Collectively, these data have led to the development of primordial and primary prevention of CVD guidelines in children and youth[4,54–56] and throughout the life course.[57,58] With emphasis on the development of healthy lifestyle behaviors as the cornerstone of both primordial and primary prevention, the ultimate goal is to promote optimal cardiovascular health beginning in childhood and adolescence and continuing throughout the life course to reduce the risk and burden of CVD and its sequelae.

Prevention Framework in the United States

The framework for health in the United States is the Healthy People framework. Healthy People 2020 is the current iteration.[59] The US Preventive Health Services Task Force and the Task Force on Community Preventive Services, sponsored by the Agency for Healthcare Research and Quality and the Centers for Disease Control and Prevention, respectively, have attempted to evaluate the evidence for the effectiveness of preventive services.[60]

Healthy People 2020 lays out a set of objectives for optimizing the health of America. The most relevant categories of Healthy People 2020 objectives include diabetes mellitus, heart disease and stroke, nutrition and weight status, physical activity and fitness, and tobacco use.[59] However, it is clear that there are substantial deficiencies and disparities in the delivery of preventive services.[61] The PPACA tried to address some of these deficiencies in clinical and community-based prevention in several programs created by the new law.[6,62] AQ:6

The PPACA mandates that clinical preventive services graded A or B by the US Preventive Health Services Task Force will be offered to people with insurance at no out-of-pocket cost. Among the CVD-related A or B services are aspirin counseling, blood pressure screening, cholesterol screening, healthy diet counseling, obesity screening and counseling, and tobacco cessation counseling.[60] The National Commission on Prevention Priorities, before the PPACA, ranked 25 US Preventive Health Services Task Force A and B–graded services according to health impact and cost-effectiveness.[63] The CVD services favorably ranked when cost-effectiveness was included as a criterion were aspirin counseling, blood pressure screening, cholesterol screening, and tobacco use counseling.

The PPACA also strengthens the Community Guide, which addresses health improvement and disease prevention at the community level by conducting systematic reviews to determine effective program and policy interventions and grading the interventions.[64,65] Nutrition, obesity, physical activity, and tobacco are among the Community Guide topics.

The Economic Burden of Cardiovascular Disease and Potential to Reduce Cost

The direct and indirect costs of CVD in the United States have been projected by the American Heart Association to increase from $272.5 and $171.7 billion in 2010 to $818.1 and $275.8 billion in 2030, respectively.[66] Most of the cost of CVD is related to short- and long-term care, not prevention.[67] In addition, these cost estimates do not include all costs related to obesity, diabetes mellitus, and tobacco use. Despite the fall in overall mortality, the prevalence of disease is expected to increase, largely as a result of the aging of the population. This troubling scenario is not inevitable; most CVD is preventable or at least can be delayed until old age with less chronic morbidity, with the potential for fewer events, less disability, and even lower costs. AQ:7

Challenges in Determining the Cost-Effectiveness of Primordial and Primary Prevention

Cardiovascular disease remains a serious medical problem that can be associated with death and disability on one hand and considerable resource use on the other. Clinical efficacy remains the primary driver for the use of any service. Once efficacy is established and despite its many limitations, cost-effectiveness analysis has an important role in assessing value. Properly applied, cost-effectiveness analysis not only offers a ratio and its distribution but also renders explicit the assumptions underlying the analysis (ie, costs of therapy,

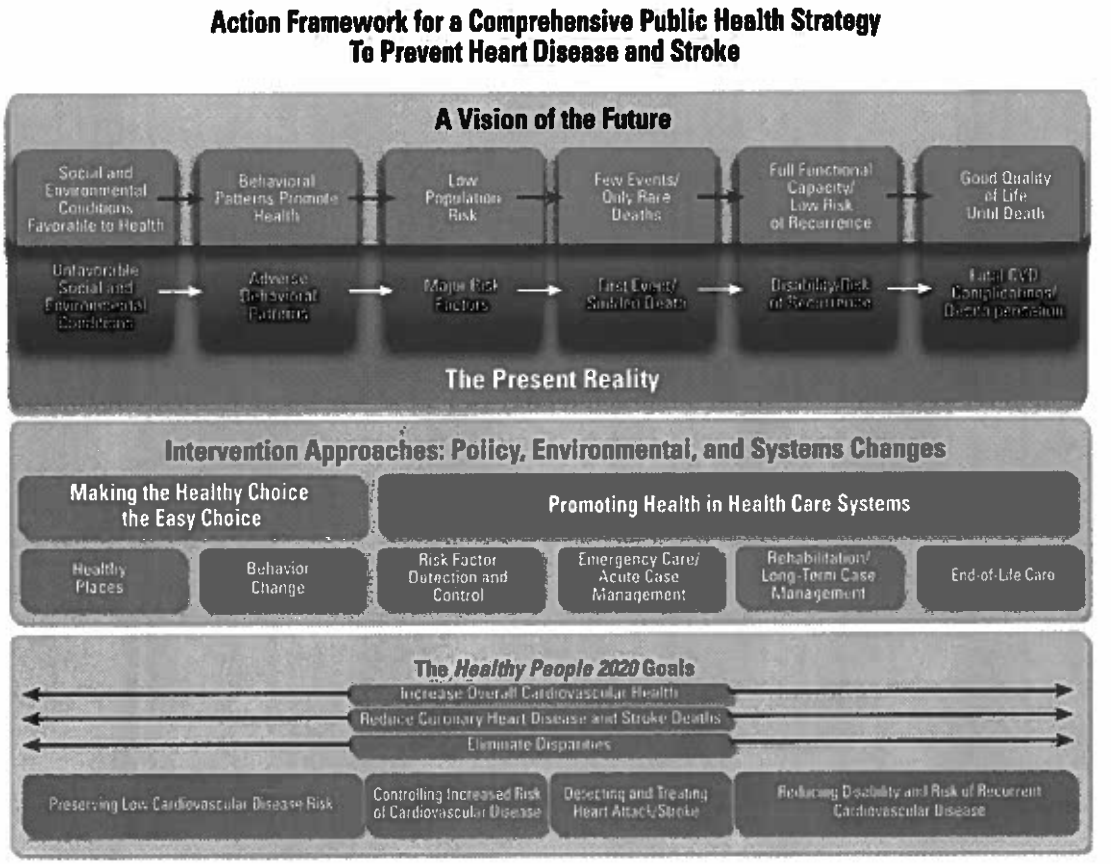

Figure 1. A framework for a comprehensive health strategy to prevent cardiovascular diseases (CVD), including policy, environmental, and systems changes to achieve Healthy People 2020 goals. Reprinted from Labarthe et al[69] with permission of the publisher. Copyright © 2005, Elsevier.

disease outcomes, and complications), thus helping patients and society evaluate the choices they make. However, in the evaluation of the value of primordial and primary prevention, formal cost-effectiveness analysis may not be realistic and may fail to evaluate value properly.

Assessing the value of prevention in apparently healthy patients is generally more difficult than evaluating therapy for established disease because the time horizon to the clinical manifestation of disease is generally long—many decades in the young. Thus, it is difficult, perhaps impossible, to assess long-term effectiveness in terms of survival or quality-adjusted life-years (QALYs) or associated costs because of increasing uncertainty about outcome the further one tries to look into the future. Furthermore, discounting (see the economics primer in the Appendix and the glossary in Table 1) works to the disadvantage of prevention because costs may accrue in the present and the benefit may become apparent only in the distant future. Thus, the costs will not be discounted but the benefit will be. Cost-effectiveness in prevention is also at a disadvantage because of the rule of rescue; for example, we will spend what it takes to save the child who falls down a well, but we will not finance the routine building of fences around wells. The rule of rescue is a fundamental, human emotional response to people in distress to which we all can respond. The decision not to build fences would be based on avoiding the costs at present to build fences around many wells to prevent 1 child from falling down a specific well perhaps years in the future, discounting the costs of rescue. Both uncertainty about value and the rule of rescue may, in part, explain why society spends most of its healthcare resources on therapy for established, often advanced, disease and comparatively little on primordial and primary prevention.

There are technical and practical limitations to studies of the cost-effectiveness of prevention. Given the difficulties of conducting long-term clinical trials, many cost-effectiveness analyses about prevention are based on mathematical models or simulations. Such models are dependent on assumptions about both overall construction and input variables and thus must be assessed with some skepticism. Because of the difficulties involved in establishing the value of prevention with formal cost-effectiveness analyses, less quantitative approaches are often appropriate and must suffice.

There are also theoretical problems with cost-effectiveness analyses of prevention. Typically, cost-effectiveness analysis considers direct medical benefit to an individual patient and both direct medical care costs and indirect costs such as lost time at work. However, it is difficult to establish the overall benefit and reduced costs that society accrues by having a healthier population and more productive workforce. The benefit is one of both preventing early death and compressing morbidity until the end of life.[68] Thus, the focus on individual benefits in the distant future and direct medical care costs incurred immediately underestimates the economic and other value to society

Table 3. American Heart Association 2010 to 2013 Strategic Policy Recommendations That Address Primordial and Primary Prevention Efforts in the United States

Federal level
Overall policy
Preserve the prevention and public health fund in the Patient Protection and Affordable Care Act
Increase funding for Centers for Disease Control and Prevention state-based heart disease and stroke prevention programs
Nutrition and dietary guidance
Develop and finalize robust nutrition standards for school meals and foods sold in schools outside the meal program; ensure schools adopt robust wellness policies that are implemented, disseminated, and evaluated
Improve food labeling to minimize consumer confusion and to increase knowledge and awareness especially about calories, sodium, saturated fat, *trans* fat, and added sugar
Effectively implement restaurant menu labeling
Address food marketing and advertising to children
Physical activity
Fit Kids Act: hold schools accountable for providing students with high-quality physical education and facilitate the integration of physical activity throughout the school day
Require that the Physical Activity Guidelines for Americans be regularly updated every 5 y in coordination with the Dietary Guidelines for Americans
Support funding for the Safe Routes to School program in the Surface Transportation Reauthorization Act, helping children walk and bike to school safely
Help implement the US National Physical Activity Plan
Tobacco
Implement Food and Drug Administration tobacco regulation in a strong and timely manner in the Family Smoking Prevention and Tobacco Control Act
Support efforts to increase access to tobacco cessation services
State level
Overall policy
Provide adequate prevention, diagnosis, treatment of overweight and obesity in the healthcare environment
AQ:8 Provide robust surveillance and monitoring
Implement comprehensive worksite wellness programs
Implement and monitor strong local wellness policies in all schools
Provide adequate funding and implementation of coordinated school health programs
Develop comprehensive obesity prevention strategies in early childhood and daycare programs
F1 Provide adequate funding for state heart disease and stroke prevention programs
Nutrition
Work to eliminate food desserts and to improve access and affordability of healthy foods (community gardens, farmers' market expansion, incentives, Healthy Food Financing Initiative)
Strengthen nutrition standards in schools for meals and competitive foods and in all government nutrition assistance or feeding programs
Implement menu labeling in restaurants
Continue to monitor and pass legislation/regulation for the removal of industrially produced *trans* fats from the food supply and to ensure the use of healthy replacement oils
Implement robust procurement standards for foods purchased by employers or government feeding programs
Physical activity
Address the built environment and support efforts to design workplaces, communities, and schools around active living; integrate physical activity opportunities throughout the day
Fund and develop walking/biking trails that connect key aspects of the community
Increase Safe Routes to School
Implement zoning/building ordinances that encourage walking/using stairs
Advocate for implementation of Complete Streets policies that allow biking and walking and are pedestrian friendly with appropriate cross-walks, sidewalks, traffic lights, and slower speed limits in walking/biking areas
Implement shared use of school facilities within the community and support the construction of school fitness facilities
Increase sports, recreational opportunities, parks, and green spaces in the community
Increase the quantity and improve the quality of physical education in schools
Support 60 min/d of supervised, moderate-to-vigorous physical activity integrated throughout the school day
Tobacco
Pass and implement comprehensive clean indoor air laws
Increase excise taxes on tobacco products
Increase/sustain funding for state tobacco control/prevention programs
Implement clinical guidance and monitor health claims around smokeless tobacco products
Advocate for comprehensive smoking cessation benefits in Medicaid, Medicare, and other healthcare plans
Eliminate tobacco sales in pharmacies and other health-related institutions

and to individuals of prevention, which offers the prospect of a healthier, more productive society at all times.

Evidence Base for the Value of Cardiovascular Disease Prevention: Societal Change

The Cost-Effectiveness/Value of Prevention: The Impact of Environment and Policy Change

The conceptual basis for implementing primordial and primary prevention is an environmental model that maintains that an individual's behavior is influenced by his or her surrounding physical, social, and cultural environments (Figure 1).[69] In other words, policy change makes the greatest impact when it optimizes the environments where people live (ie, workplaces, schools, homes, and communities), making healthier behaviors and healthier choices the norm by default or by design and putting individual behavior in the context of multiple-level influences. This environmental model represents a shift away from prioritizing individual behavior change that focuses on individual-level or intrapersonal influences. For example, passing comprehensive clean indoor air laws,[70] raising tobacco excise taxes,[71] or reducing sodium from the food supply[19] can have a profound impact on a large segment of the population and may contribute to marked improvements

in cardiovascular health. State-level policies have been shown to reduce junk food in vending machines and school stores.[72] These population-based strategies are a critical complement to preventive services and treatment programs in which practitioners and patients are working together to foster important individual behavior and lifestyle changes.[73] In fact, research continues to demonstrate that environment and policy change is one of the most impactful ways to improve public health, providing the counterargument to those policy makers who argue that government has no role, that health is largely an individual's responsibility.[74–77] Many policy strategies to affect environmental change are relatively new, and evidence continues to emerge on their cost-effectiveness and economic value. This article summarizes many of them and underscores the important role that T3 policy change has in affecting public health. Table 3 summarizes the American Heart Association's 2010 to 2013 specific strategic policy priorities that address primordial and primary prevention. These priorities certainly do not encompass all of the policy strategies that are underway in prevention efforts, but they are the priorities of one major nonprofit organization working in collaboration with coalitions and partners in public health.

Communities

Community leaders are beginning to understand the preventive value of environment and policy changes that facilitate a healthy diet, increased physical activity, and elimination of tobacco use. Three recent landmark reports have highlighted policy strategies at the community level to address cardiovascular health, sensitizing community leaders, policy makers, and organizations to a range of policy options such as access to and affordability of healthy foods; opportunities for active living through the built environment and parks, recreational spaces, and walking/biking trails; increased consumer knowledge with approaches like menu labeling in restaurants; and strengthened nutrition standards and physical education/physical activity opportunities in schools for children.[78–80] Cities across the United States are debating the best ways to convert vacant lots or brown fields in the context of economic development. Community gardens, small parks, and open green spaces are excellent options for these areas that positively impact surrounding residential properties, increase rates of home ownership, and spur economic redevelopment.[81] Other studies have shown the direct cost-benefit of building bike/pedestrian trails by reducing healthcare costs associated with physical inactivity. A study based on a simulation model found that for every $1 invested in building these trails, nearly $3 in medical cost savings may be achieved.[11] Linking different parts of the community with trails and walkways spurs community integration, more efficient land use, lower traffic congestion, and better quality of life.

Other initiatives like the Healthy Food Financing Initiative AQ:9 address the importance of making healthy, affordable foods available in low-income urban, rural, and minority communities. The Healthy Food Financing Initiative provides critical loan and grant financing for food retailers to renovate existing stores or to develop new stores to provide healthy foods.[82] Concurrently, the Healthy Food Financing Initiative reduces health disparities, creates jobs, and stimulates local economic development. One example is the Pennsylvania Fresh Food Financing Initiative, a public-private partnership created in 2004 that led to 83 new or renovated supermarkets and fresh-food outlets, providing 400 000 residents with access to healthy food while creating or maintaining 5000 jobs. Essentially, $190 million was leveraged as a result of $30 million in state seed money. A recent report by Trust for America's Health showed that an investment of $10 per person per year in proven community-based prevention programs could save the country more than $16 billion annually within 5 years.[7] This report is based on a model developed by researchers at the Urban Institute that assessed medical cost savings only, not additional gains from worker productivity, reduced absenteeism, or quality-of-life measures. The researchers made low-end assumptions for the drops in disease rates and high-end assumptions on costs of programs based on a comprehensive review of the literature.

New York City and several other major cities have been on the forefront of public health policy change with initiatives such as smoking bans in public buildings and workplaces, *trans* fat bans in restaurants, restaurant menu labeling, the Green Kart initiative, and healthy corner store initiatives. Most recently, the New York City Department of Health has led the National Sodium Reduction Initiative, a partnership of ~64 cities, states, and national health organizations, in establishing target levels for sodium reduction by food categories and soliciting pledges from food companies to meet these targets. The many benefits of lowering sodium intake underscore the need for a comprehensive, coordinated public health strategy to lower the amount of salt in the food supply to 1500 mg/d by 2020. It is estimated that if the US population moved to an average intake of 1500 mg/d sodium, there would be a 25.6% overall decrease in high blood pressure and $26.2 billion in healthcare savings.[15] Such a national effort would result in fewer coronary heart disease events, strokes, heart attacks, and deaths.[83]

Worksites

The worksite is an important environment for policy implementation and program intervention. More than 130 million Americans are employed across the United States annually, and workplace wellness programs have been shown to prevent the major shared risk factors for CVD and stroke.[84] Comprehensive worksite wellness programs are aimed at improving employees' cardiovascular and general health and should include the following: tobacco cessation and prevention; regular physical activity; stress management/reduction; early detection/screening; nutrition education and promotion; weight management; disease management; CVD education, including cardiopulmonary resuscitation and automated external defibrillator training; and changes in the work environment to encourage healthy behaviors and to promote occupational safety and health.[84] An estimated 25% to 30% of companies' medical costs per year are spent on employees with obesity, hypertension, dyslipidemia, and diabetes mellitus and those who use tobacco products.[85] A recent meta-analysis showed that medical costs fell by ~$3.27 and absenteeism costs fell by $2.73 for every dollar spent on worksite wellness programs.[8] These savings are most often realized within the first 12 to 18 months.[85] Average reduc-

tions in sick leave absenteeism, healthcare costs, and workers' compensation and disability management claims were 28%, 26%, and 30%, respectively.[86,87] Productivity outcomes are harder to measure in today's postmanufacturing economy, and many employers do not have the resources or expertise to conduct such assessment.[88,89] Most productivity estimates are based on questionnaires that often yield varied estimates of on-the-job productivity gains or losses even when administered in the same setting.[90,91] Overall, however, considerable data now suggest that health-related productivity losses from employees with health risk factors or chronic disease cost US employers $225.8 billion a year or $1685 per employee per year, of which 71% is due to reduced performance at work.[92] Currently, the low level of intervention provided in the US workforce for many at-risk employees offers the opportunity to recuperate substantial productivity gains by initiating evidence-based health promotion programs, activities, and policy change in the worksite environment.[84,93]

Healthcare Systems

Healthcare systems are increasingly a target of policy intervention concerning healthy food and beverage offerings, worksite health promotion, and tobacco-free environments because they are often leading employers and role models within the community. Many hospital systems have established tobacco-free environments and are providing healthier foods and beverages in their cafeterias, food service, and vending machines[94]; improving their procurement strategies; and/or making their worksite wellness programming and health promotion efforts more robust.

Schools

More than 55 million children spend the majority of their day in schools across the United States. Accordingly, it is vitally important to offer healthy educational environments by providing opportunities for daily physical activity and/or physical education and healthy foods and beverages to create a foundation for learning the fundamentals of healthy living. School-based interventions can be effective in preventing the development of obesity in children, even in low-socioeconomic-level neighborhoods, although results are often modest and short term.[95,96] Most research focuses on other types of outcomes such as academic performance, nutrition education, physical education, physical fitness, behavior in the classroom, and knowledge gain. For example, numerous studies have documented that children who are more physically fit perform better academically, have higher attendance, display fewer behavioral problems in the classroom, and improve the overall quality of the school environment.[97–101] Schools can provide the knowledge base children need to practice healthy behaviors for a lifetime and the policy and environment changes that reinforce this prevention-related education. Providing healthier meals can also be cost-effective and may lead to better food choices at home and outside of school.[102–104] Comprehensive school interventions to promote healthy eating and physical activity can be cost-effective, ranging from $900 to $4305 per QALY saved.[9,10]

Further research is needed to determine the long-term effectiveness of policy and environment change in schools on nutrition, physical activity, obesogenic behaviors, and health outcomes, especially in at-risk populations, and the associated impact on community and home, as well as the short- and long-term cost savings associated with these interventions.[105,106]

Addressing Disparities

Lower socioeconomic and educational status are established risk factors for CVD.[107] Additionally, the obesity epidemic and risk factors for CVD such as smoking, physical inactivity, hypertension, and diabetes mellitus are disproportionately prevalent in certain populations, especially non-Hispanic blacks, American Indians, Hispanics/Latinos, and Pacific Islanders, compared with non-Hispanic whites.[1] Children also make up a vulnerable population, and their health statistics are worsening. To attenuate these disparities, policy work will have to prioritize opportunities to address social inequities, issues specific to vulnerable populations (ethnic and racial minorities, those with low income or less education, children, blue collar workers), and the importance of removing barriers and obstacles for risk reduction and behavior change. Often, the most disadvantaged members of the population have the greatest need for preventive screenings, health promotion, or programming and have the least access to or are the most reluctant to participate in these opportunities.[108] The fundamental causes of vulnerability are rooted in issues of daily life, most often beyond the scope of traditional public health. Thus, it will be important for the public health community to consider engaging with nontraditional partners to promote increased prevention strategies and to reduce health disparities in communities.[109] Additional research is needed to determine how best to reach and engage underserved populations and to optimize policy interventions for people of all races, ages, ethnicities, and education and income levels.

Ongoing research and evaluation of preventive interventions and policy change in community settings will provide additional data on cost-effectiveness and value. The Sydney Diabetes Prevention Program, for example, is a community-based translational study with >1500 participants who are at high risk of developing diabetes mellitus. The study will ascertain the reach, feasibility, effectiveness, and cost-effectiveness of delivering a lifestyle modification program in a community setting through primary health care.[110] Too often, the difficulty in assessing the cost-effectiveness of these types of public health interventions is the lack of specific effectiveness data and insufficient sample sizes, inadequate follow-up, or different basic principles of analysis used by health promoters and economists.[111] To bridge the evidence gap and to provide a framework for informed decision making, it will be important to promote effective policy evaluation, optimal research design in real-world settings, and common outcome measures to assess the true value and economic impact of change and to incorporate individuals' broader perspective of well-being.

Evidence Base for the Value of Cardiovascular Disease Prevention: Behavior Change

As models suggest, the willingness for individuals to change their lifestyle behaviors is affected by a number of factors such as the different stages of readiness, perceived threat or

susceptibility of developing a health condition, concerns about the seriousness of the preventable condition, perceived benefits of changing behavior, and cues to action that might come from social networks and their surrounding environment.[112] This section outlines the cost-effectiveness of primordial and primary prevention concerning environment and policy change that affects behavior in the areas of tobacco use, physical activity, diet, and obesity.

Tobacco Use

Smoking costs the US economy more than $301 billion per year, including workplace productivity losses of $67.5 billion, premature death at $117 billion, and direct medical expenditures of $116 billion.[20] These costs to people's lives and their quality of living underscore the importance of primordial prevention such as state tobacco control and prevention programs and smoke-free air laws and primary prevention efforts such as adequate coverage for cessation therapy and tobacco excise taxes.

Tobacco Control and Prevention Programs

In 1998, the 4 largest US tobacco companies and the attorneys general of 46 states signed the Tobacco Master Settlement Agreement, settling the states' Medicaid lawsuits against the tobacco industry for recovery of their tobacco-related healthcare costs. Under the agreement, states received upfront payments of $12.74 billion with the promise of an additional $206 billion over the next 25 years. Ideally, states would use this money to fully fund tobacco control programs that follow Centers for Disease Control and Prevention "best practices." Unfortunately, as a result of the negative fiscal environment and competing priorities, only 1 state, North Dakota, currently funds its tobacco prevention programs at Centers for Disease Control and Prevention–recommended levels. Revenue from the settlement continues to flow toward other parts of state budgets despite the fact that state tobacco control program expenditures have been shown to be independently associated with overall reductions in smoking prevalence.[113] States are sacrificing long-term health benefits and healthcare cost reductions for short-term budget fixes. If all states had funded their tobacco control programs at the minimum or optimal levels recommended by the Centers for Disease Control and Prevention, there could have been millions of fewer smokers a decade later.[113]

Smoke-Free Environments

Passing comprehensive smoke-free air laws in public places and work environments is a cornerstone of the public health strategy in tobacco control efforts. Although these efforts have been extremely effective in protecting a large segment of the US population from the deleterious effects of secondhand smoke, >88 million nonsmokers >3 years of age are still exposed, especially children in the home.[114] The Institute of Medicine, backed by studies from around the world, published a report showing reduced incidence of acute myocardial infarction after implementation of clean indoor air laws in workplaces and communities.[115] Lightwood et al[116] developed a simulation to estimate the CVD event incidence and costs as a function of risk factor prevalence, including passive smoking. At 1999 to 2004 levels, passive smoking caused 21 800 to 75 100 CVD deaths and 38 100 to 128 900 myocardial infarctions annually, with a yearly treatment cost of $1.8 to $6.0 billion. The Institute of Medicine estimates direct and indirect healthcare costs associated with disease incidence caused by secondhand smoke exposure at $10 billion annually.[18]

There are other economic arguments for clean indoor air laws. The hospitality and tobacco industries often promote the idea that business will suffer after these laws are passed. However, increasing evidence from municipalities, states, and countries shows no significant impact on sales data, and in many instances, business actually increases after a short-term initial decline.[117] Additional benefits for businesses are lower cleaning costs, lower worker absenteeism, and increased productivity.[118]

Several federal government initiatives[114] are currently underway to address comprehensive smoke-free air policies and tobacco control, including funds from the American Recovery and Reinvestment Act that have been distributed to communities, territories, and states to address tobacco control. In 2009, the US Department of Housing and Urban Development issued notices encouraging public housing authorities to implement no-smoking policies. Moreover, the US Environmental Protection Agency conducts a national campaign that educates and encourages parents to make their homes smoke free to protect their children's health.

Tobacco Excise Taxes

Tobacco excise taxes are another pillar of the tobacco control movement. The federal government has imposed excise taxes, most recently with the expansion of the Children's Health Insurance Program. A cigarette tax increase of 61.66 cents per pack went into effect on April 1, 2009. There were also increases in the federal tax rates on other tobacco products such as smokeless products, "small cigars," roll-your-own tobacco, and regular cigars. At the same time, states have imposed tobacco excise taxes with a current nationwide average of $1.45 per pack (as of July 2010). As a leader in public health initiatives, the state of New York (June 2010) raised its cigarette tax by $1.60 to give it the highest cigarette tax in the nation at $4.35 per pack.

A robust literature has examined the impact of cigarette tax increases on smoking prevalence, especially in youth. Most studies have found that higher taxes reduce consumption, especially via cessation rates in young smokers.[71,119] Modeling techniques have estimated that a 40% tax-induced cigarette price increase would reduce smoking prevalence to 15.2% in 2025 with large gains in cumulative life-years (7 million) and QALYs (13 million) for a total cost savings of $682 billion.[17] Industry documents show, however, that the tobacco companies understand the impact of tax increases on consumption and have developed pricing strategies, including the development of lower-cost generics and price-related marketing efforts such as multipack discounts and couponing to reverse these effects.[120] The tobacco control movement has to continue to adapt to strategies to maintain the health impact and value of tobacco use prevention strategies.

Physical Activity

The benefits of regular exercise and cardiorespiratory and general physical fitness are numerous and contribute signif-

icantly to health impact and cost savings, including lower risk for CVD and diabetes mellitus, improved musculoskeletal health, better weight management, reduced risk for hypertension, less dyslipidemia, preserved cognitive function, reduced symptoms of depression, and improved overall quality of life.[121–125] The majority of children, adolescents, and adults do not achieve the recommended levels of physical activity each day, spending a majority of their time in sedentary activities.[126,127] The proportion of adults who meet the physical activity guidelines varies by education level: 46% of people with a college degree or higher are regularly active compared with only 21.4% of adults with less than a high school diploma.[128] When assessed with actual accelerometer data from the National Health and Nutrition Examination Survey rather than self-reported physical activity, the data are much more sobering: Only 3.8% of adults engage in moderate to vigorous physical activity at least 5 days a week.[129] Globally, ≈1.9 million deaths per year are attributed to physical inactivity.[127] There is a strong, positive relationship between physical inactivity and QALYs lost in the obese population.[130]

The Task Force on Community Preventive Services recommends physical activity interventions under 4 major strategies: community-wide campaigns, individually adapted healthy behavior change, community social-support interventions, and the creation of or enhanced access to physical activity information and opportunities.[12] Studies that have examined the cost-effectiveness of community-based physical activity interventions show some reduction of chronic disease incidence and incremental cost and incremental effectiveness ratios (ICERs) ranging from $14 000 to $69 000 per QALY gained relative to no intervention, especially in high-risk groups.[12–14] These interventions can also be successfully implemented in a cost-effective way in primary care settings to reduce CVD risk and to improve quality of life.[131] Pedometer programs and mass media–based community campaigns have been found to be the most cost-effective, whereas general practitioner referral to an exercise physiologist was the least cost-effective because of travel costs and the associated time spent on consultation and screening.[127] A behavior-based intervention in which participants were taught to integrate daily moderately vigorous physical activity into their lives was found to be more cost-effective than a structured exercise program for improving physical activity and cardiovascular health.[132] A report from the National Institute for Clinical Excellence in the United Kingdom found that when the costs of health care avoided are included, exercise programs are dominant(ie, offer better outcome at a lower cost).[133]

Despite accumulating evidence on the cost-effectiveness of exercise promotion and intervention in various settings, there is significant heterogeneity in study quality, intervention strategies used, and measured health and behavior outcomes. Further research and cost-effectiveness analyses are needed to determine sustainability, long-term outcomes, impact on various population subgroups, wide-ranging appeal, and perceived value that people place on the time they spend exercising.[134,135]

Diet and Obesity

The centerpiece of a healthy lifestyle is a diet and physical activity pattern that follows the evidence-based recommendations put forward by several agencies, including the US Department of Agriculture, the American Diabetes Association, and the American Heart Association. A growing body of evidence supports the benefits of following the established dietary guidelines. Compared with those who did not follow the guidelines, those who reported adherence to the dietary guideline had a lower prevalence of the metabolic syndrome,[136] and among women, there was a lower prevalence of insulin resistance,[137] a lower odds of carotid atherosclerosis,[138] and slower progression of atherosclerosis.[139] Moreover, adherence to the dietary guidelines was associated with reduced CVD mortality, significantly smaller waist circumference, and lower levels of serum insulin and C-reactive protein concentration.[140] Numerous clinical trials have demonstrated the benefits of reduced sodium intake[141–143] and the benefits of healthy eating patterns such as the Mediterranean-style diet.[144–147] However, despite the cumulative evidence supporting the benefits of a healthy diet on blood pressure, lipids, insulin sensitivity, and body weight, the majority of the population does not meet several of the public health targets set forward in the dietary guidelines. It has been estimated that >50% of global deaths can be attributed to diet.[148] Clearly, the cost of these unnecessary deaths and the comorbidity preceding the deaths is astronomical.

Today, one of the most significant and prevalent conditions associated with nonadherence to the dietary guidelines is obesity. Overall, the economic impact of obesity in the United States is substantial.[149] In 2011, ≈66% of adults in the United States are overweight, including 33% who are obese.[150] Among children, the prevalence of obesity in recent years has increased 2- to 3-fold.[151] Research examining the costs of obesity has focused on 3 areas of impact: direct medical costs, productivity costs, and human capital costs.

Direct Medical Costs

Obesity is associated with myriad comorbid conditions; for example, hypertension, diabetes mellitus, CVD, arthritis, and sleep disorders.[152–154] As the medical conditions associated with obesity increase, so do the associated medical costs—from diagnosis to treatment of these disorders. The methods used and the populations studied in examining the cost of overweight and obesity vary widely; however, there is widespread agreement that the medical costs are substantial.[155] One example of costs attributed to overweight and obesity comes from a study of a managed-care population between 35 and 64 years of age that was followed up for 9 years. On average, obese patients accumulated annual costs that were 36% higher than the healthy-weight group, which included 105% higher costs for prescriptions and 39% higher primary care costs. When the overweight group was compared with the healthy-weight group, prescription costs were 37% higher and primary care costs were 13% higher.[156] Others have used regression analysis of nationally representative surveys such as the 1998 and 2006 Medical Expenditure Panel surveys and the National Health Expenditure accounts data to derive cost estimates of obesity of $147 billion in 2008.[157] A recently published article reported that almost 17% of US medical costs can be attributed to the treatment of obesity and suggested that the obesity problem in the United States may

be having close to twice the impact on medical spending as previously estimated.[158] Estimates of medical costs for childhood obesity in the United States are ≈$14.3 billion.[159]

Productivity

Costs of lost productivity are substantial and have been studied extensively. Distinct subcategories of productivity exist, for example, absenteeism, or reduced productivity because the person is absent from work for obesity-related health reasons, and presenteeism, or decreased productivity while the person is at work. Other sequelae include premature mortality, impaired quality of life, increased rates of disability benefit payments, and increased medical care costs. It is difficult to compare the magnitude of absenteeism across studies because of the different methodologies used; however, a study reported that compared with a normal-weight employee, an overweight/obese employee lost an additional 3.73 days of work per year, with 36% of illness-related absences resulting from body habitus.[160] Nationwide, annual estimates of this loss in productivity range from $3.38 billion to $6.38 billion.[161] One investigator examined disability and reported that for men, being obese increased the probability of receiving disability income by 6.92%; for women, the increased probability was 5.64%. Premature mortality or reduced QALYs is another form of lost productivity associated with obesity. One study reported that the largest effect of obesity on morbidity was among white men; a 20-year-old white man with a body mass index >45 kg/m^2 could be expected to have a 22% reduction in remaining life-years, the equivalent of 13 years of life lost.[162] Obese people have reported lower quality of well-being, which at the national level translates into 2.93 million QALYs lost in the United States.[163]

Human Capital

Human capital is defined as the both the quantity and quality of education an individual is able to attain. The accumulation of human capital is inversely related to overweight/obesity. There is an association between body mass index and days of school missed[100] and the number of school years completed[164]; moreover, there is a consistent negative relationship between weight and grade point average among female students.[165] Among nonwhites, the relationship exists for both male and female students. These findings emphasize the impact of childhood obesity on not only educational attainment but also other related aspects of life.

The research examining the economic impact of obesity varies widely in the data sources and methodologies used. The data thus far confirm that there is a substantial cost to obesity in direct medical costs and productivity; however, further research is needed in the area of accumulation of human capital and in policy development that addresses these significant costs.[149]

Considering the negative economic impact of obesity, it would seem logical that interventions to reduce obesity would be beneficial in terms of lowering an organization's medical costs and improving worker productivity. Return-on-investment models have been used to forecast program savings in several large organizations; the most costly employees for employers were those with certain modifiable risk factors. Applying a predictive return-on-investment model, another group of investigators tested whether an obesity management program would result in reduced health risks at 119 employer sites.[16] The program included four 30-minute telephone-based coaching sessions each month for a year, plus access to educational materials, exercise planning support, nutrition education, stress management, and Web-based health tracking. Of the 1542 participants enrolled, 890 (57.7%) completed the program. At 1 year, there was a statistically significant reduction in 7 of the 10 risk categories monitored, with sizable reductions in body weight and poor eating and poor physical activity habits. On the basis of the return-on-investment analysis, compared with no changes occurring, there was a reduction in total employer expenses by $311 755. Additionally, 59% of the total projected expense reductions were attributed to a 4.3% reduction in healthcare expenditures and 41% were attributed to enhanced productivity.[16] Other investigators have reported findings consistent with these results, supporting the association between health risk reductions, absenteeism, and presenteeism.[86,157,158]

Researchers in Switzerland developed a Markov model to evaluate the lifetime effect of a 3-year lifestyle intervention and compared it with standard care among overweight and obese adults.[166] Lifestyle intervention increased both survival and quality of life and dominated standard care in borderline obese and obese men and women. In the overweight group with an average body mass index of 27 kg/m^2, costs were higher with lifestyle intervention but were offset by the reduced risk of developing obesity-related complications and comorbidities.

Another group in Europe examined published studies to determine how cost-effective dietary changes were compared with other measures targeting CVD risk reduction.[167] Although the comprehensive studies available were limited in number and quality, findings suggested that health-promoting strategies that targeted healthy eating were more cost-effective than strategies that included pharmacotherapy for lipid reduction or nurse screening and adjunctive lifestyle counseling.

Between 2005 and 2007, the Partnership for Prevention evaluated the relevant evidence to support the ranking of the health impact and cost-effectiveness of 25 clinical preventive services that had been recommended by the US Preventive Health Services Task Force and the Advisory Committee on Immunization Practices. This ranking, based on the clinically preventable burden, measures the health impact on the affected population and the cost-effectiveness of each service; each of these received a score between 1 and 5. A score of 5 for clinically preventable burden was given to the services that produced the most health benefits; a 5 was also given to the service deemed most cost-effective. Included in this list of services was obesity screening with high-intensity lifestyle counseling for obese patients, which had clinically preventable burden and cost-effectiveness scores of 3 and 2, respectively. Diet counseling, which included intensive behavioral counseling for patients with hyperlipidemia and other risk factors for CVD and diet-related chronic diseases, received clinically preventable burden and cost-effectiveness scores of 1, suggesting that these services, at least in their present format, did not appear warranted.[168] These rankings are considerably lower than those for such activities as tobacco counseling or screening for hypertension or hyperlipidemia.

Changing Diet

Although the evidence suggests that dietary counseling for CVD and diet-related disorders has limited impact on health, a diet that is high in fruits and vegetables can reduce the risk of several major causes of death and contribute to weight management.[137–139] Objectives of Healthy People 2010 included related targets such as having 75% of the population >2 years of age consume ≥2 fruit servings daily and 50% consume ≥3 vegetable servings daily. According to the latest update on progress in meeting these objectives, which was based on Behavioral Risk Factor Surveillance System data, ≈32.5% of adults consumed ≥2 servings of fruit per day and 26.3% consumed ≥3 servings of vegetables per day.[169] These results demonstrate not only that the population is far short of meeting these objectives but also that there has been a slight but significant decline in fruit consumption since 2000. Collectively, these findings emphasize the serious need for interventions at multiple levels (eg, point of purchase, schools, worksites, and community settings) that will improve access to affordable fruits and vegetables. Recently, an intensive lifestyle intervention that focuses on diet and physical activity has been shown to be successful in achieving weight loss in severely obese adults.[170] Moreover, a commercial weight loss program with free prepared meals and incentivized weight loss can effect weight loss and prevent weight regain.[171] These findings may extend the potential reach of this treatment approach to weight loss.[172,173]

Evidence Base for the Value of Cardiovascular Disease Prevention: Therapeutic Areas

Several diseases and chronic health states are associated with CVD risk: diabetes mellitus, hyperlipidemia, hypertension, and tobacco use. This section focuses on the cost-effectiveness of primary prevention in the clinical environment or community setting that is therapeutic in nature to initiate behavior change or to prevent the onset of chronic disease.

Tobacco Cessation Therapy

In general, tobacco cessation treatment remains highly cost-effective, even though a single application of any treatment for tobacco dependence may be successful in only a minority of smokers long term.[174] There is a strong relationship between the length of behavior counseling sessions, provider-to-person contact, and successful treatment outcomes.[19] Available forms of nicotine replacement therapy (gum, transdermal patch, nasal spray, inhaler, and lozenges) increase quit rates by 50% to 100% over placebo; however, fewer than 1 in 5 smokers who are trying to quit take advantage of these products. The reasons for lower use are the inadequacies of dosing strength, formulations of existing medications, perceptions about the high cost of the drugs, and smokers' concerns about the safety and efficacy of nicotine medications. The ICERs for treatment programs range from a few hundred to a few thousand dollars per QALY saved.[19]

In July 2006, the Massachusetts healthcare reform law mandated tobacco cessation coverage for the Massachusetts Medicaid population. On implementation of the benefit, MassHealth subscribers were allowed two 90-day courses per year of Food and Drug Administration–approved medications for smoking cessation, including over-the-counter medications like nicotine replacement therapy, and up to 16 individual or group counseling sessions. A total of 70 140 unique MassHealth subscribers used the newly available benefit between July 1, 2006, and December 31, 2008 (ie, ≈37% of all Medicaid smokers). Before July 2006, there had been no significant change in smoking prevalence among the MassHealth population because smoking rates remained relatively high in this state. However, after implementation, in just over 2 years, 26% of MassHealth smokers quit smoking, and there was a decline in the use of other costly healthcare services (38% decrease in hospitalizations for heart attacks, 17% drop in emergency room and clinic visits for asthma, and a 17% drop in claims for adverse maternal birth complications, including preterm labor).[175] Additional research showed that comprehensive coverage led to reduced hospitalizations for heart attacks and a net savings of $10.5 million or a $3.07 return on investment for every dollar spent.[21,175] A study by the American Lung Association showed that economic benefits to states offering comprehensive smoking cessation therapy to their employees in their public health or tobacco control programs can save $1.10 to $1.40 in healthcare expenditures and productivity for every dollar spent.[176]

The health benefit of cessation and relapse therapy during pregnancy is even more apparent, minimizing low birth weight, placental abruption, sudden infant death syndrome, and other illnesses and life-threatening conditions for mother and child.[177] Moreover, a systematic review of the literature revealed a cost-to-benefit ratio as high as 3:1 (ie, for every $1 invested in cessation/relapse programs, $3 were saved in downstream health-related costs).[22]

The PPACA requires state Medicaid programs to cover comprehensive tobacco cessation treatments, with no copayments, for pregnant women as of October 1, 2010. States have a tremendous opportunity to save even more lives by applying tobacco cessation treatments to all smokers in Medicaid. Nationwide, 36.6% of people in Medicaid smoke compared with 22.6% of the general population.[178] Ideally, comprehensive tobacco cessation services should be offered in all public and private healthcare plans.

Diabetes Mellitus

People with diabetes mellitus have CVD mortality rates that are 2 to 4 times higher than those for people without diabetes mellitus. Moreover, the estimated cost of diabetes mellitus in the United States in 2007 was $174 billion, with 28% of expenditures attributed to cardiovascular complications of diabetes mellitus.[179] Current projections suggest that 1 of 3 people born in 2000 will develop diabetes mellitus over his or her lifespan.[23] A critical aspect of CVD and stroke prevention is screening for diabetes mellitus, along with early interventions, including behavioral modification, drug therapy, or both.

Diabetes Mellitus Screening

The American Diabetes Association (2010) recommends universal screening for T2DM in adults at 45 years of age that is repeated at least every 3 years.[180] Asymptomatic adults who are overweight or obese and who have 1 or more risk

factors (physical inactivity, cigarette smoking, family history in first-degree relative, history of CVD or hypertension, high-density lipoprotein <35 mg/dL, triglycerides >250 mg/dL, impaired glucose tolerance, impaired fasting glucose, or hemoglobin A_{1c} ≥5.7%; women with polycystic ovary syndrome or who delivered a baby >9 lb; blacks; and Latinos, Native Americans, Asian Americans, or Pacific Islanders) should be considered for screening regardless of age.[180] A recent systematic review of cost-effectiveness interventions to prevent and control both diabetes mellitus and the resulting complications found that targeted screening for T2DM based on age and risk was found to be far more cost-effective (ICERs ranging from $46 800 to $70 500 per QALY gained) compared with universal screening (ICERs from $70 100 to $982 000 per QALY gained).[24] Targeted screening for undiagnosed T2DM in blacks between 45 and 54 years of age was the most cost-effective, with an ICER of $19 600 per QALY gained relative to no screening. For people with T2DM, statin therapy for the prevention of CVD was supported by strong evidence of cost-effectiveness.

Other studies examined the cost-effectiveness of more targeted screening, whether by age or risk factors. A recent study using a mathematical model based on a representative sample of the US population found that screening for T2DM at 30 and 45 years of age, repeated every 3 to 5 years, is cost-effective, with ICERs of ≈$10 500 or less per QALY gained.[181] There was a significant reduction in the incidence of myocardial infarction (5 to 7 events prevented per 1000 people screened) compared with no screening. Similar findings were shown for screening those with a diagnosis of hypertension, either annually or every 5 years, with a reduction in the incidence of myocardial infarction (3 events per 1000 people screened), although there was little or no effect on the incidence of stroke. The authors suggested that their results differed from other cost-effectiveness analyses because their model included the most recent treatment recommendations for more aggressive use of glucose-lowering drugs for T2DM.

Diabetes Mellitus Prevention and Treatment

The Finnish Diabetes Prevention Study demonstrated that lifestyle modification could delay or prevent the development of T2DM, and this approach has subsequently been implemented throughout Finland.[182,183] The US Diabetes Prevention Program (2002) demonstrated that lifestyle modification and treatment with metformin could delay or prevent the development of T2DM.[184] Of interest, the lifestyle changes reduced the incidence of diabetes mellitus by 58%, whereas metformin therapy reduced the risk by 31%.[25] In patients with impaired glucose tolerance, a systematic review of the literature revealed that primary prevention, in the form of intensive lifestyle modification, is unequivocally cost-effective compared with standard lifestyle recommendations or no intervention, with a median ICER of $1500 per QALY gained.[24] The intensity of intervention required to improve glycemic control remains unclear. One study postulated that in adults with T2DM, an additional 23.6 contact hours in diabetes mellitus self-management education would be required to produce a hemoglobin A_{1c} decrease of 1% (95% confidence interval, 13.3 to 105.4).[185] Other cost-effectiveness analyses outside the United States have also found both drug and lifestyle interventions to be cost-effective, although it is difficult to extrapolate those results to the United States because healthcare and reimbursement systems vary significantly.[184,186]

Mathematical models evaluating the cost-effectiveness of community-based diabetes mellitus prevention programs using lifestyle interventions show conflicting results. A community-based modified Diabetes Prevention Program intervention designed to reduce risk factors for T2DM decreased metabolic syndrome risk by 16.2% at 12 months compared with 12.1% for usual care at an increased cost of $3420 per QALY gained.[187] However, a 10-year community intervention study in Sweden of lifestyle changes to prevent diabetes mellitus offered equivocal results that were not as favorable as the Diabetes Prevention Program model.[188] In diabetes mellitus prevention programs from a societal perspective, model estimates may vary, depending on the intervention approach and lifetime projections.[189,190] One study showed that cost per QALY of lifestyle intervention was much less than with metformin, whereas another study found that Diabetes Prevention Program treatment with metformin or delaying lifestyle intervention until after diagnosis was more cost-effective than earlier Diabetes Prevention Program lifestyle intervention.[189,190]

Because of the improvement in risk factor control, patients who have been newly diagnosed with diabetes mellitus since 2005 have a better prognosis than their counterparts who were diagnosed 11 years earlier.[191] Once a patient is diagnosed with T2DM, there is strong evidence that it is cost-saving to implement multicomponent interventions (standard antidiabetic care, education, angiotensin-converting enzyme inhibitors, and screening for microvascular complications) compared with standard antidiabetic care.[24] Intensive glycemic control resulted in a median ICER of $12 400 per QALY gained. More intensive control of glycosylated hemoglobin (to a goal of <6%) was not shown to further reduce CVD events and was associated with increased mortality in the Action to Control Cardiovascular Risk in Diabetes (ACCORD) AQ:11 trial.[192] However, a meta-analysis of ACCORD, Action in Diabetes and Vascular Disease (ADVANCE), United Kingdom Prospective Diabetes Study (UKPDS), and VA Diabetes Trial (VADT) data showed a benefit of tight glycemic control on macrovascular outcomes and no increase in mortality.[193] Bariatric surgery, an emerging treatment strategy for diabetic patients who are severely obese, has also been found to be relatively cost-effective, with ICERs ranging from $7000 to $13 000, depending on the type of procedure (banding verses bypass) and length of time since diabetes mellitus diagnosis.[194]

The ability to compare results of current studies is limited by marked differences in methodologies and intervention descriptions, including the lack of sufficient detail describing lifestyle interventions. Overall, more economic evaluations of diabetes mellitus intervention are needed to evaluate the cost-effectiveness for both prevention and treatment.

Lipid Screening and Primary Prevention

Elevated LDL-C is a major risk factor for CVD.[195] Multiple major clinical trials and national clinical guidelines support

screening for adverse levels of cholesterol and offer recommendations for treatment, including both lifestyle and pharmacological therapy.[60] Several meta-analyses have addressed the effectiveness of statin therapy for primary prevention. Ray et al[196] found a trend toward reduced all-cause mortality. A 2011 Cochran review found reduced risk of all-cause mortality (relative risk, 0.83; 95% confidence interval, 0.73 to 0.95) and nonfatal events with statin therapy.[197] Although there is general agreement about the value of statins to reduce elevated LDL-C in high-risk individuals, research varies as to what constitutes a "normal" range of LDL-C, when to initiate statin therapy, and the best therapeutic range for primary and secondary reduction of cardiovascular events.[198–200]

Manuel et al[201] noted that the effectiveness and efficiency of algorithms for statin treatment based on 6 different national or international guidelines on statin treatment to prevent deaths from CVD varied widely. When applied to a Canadian population, Australian and British guidelines were most effective, potentially preventing the most deaths over 5 years (>15 000 deaths). The New Zealand guideline was most efficient, potentially preventing almost as many deaths (14 700) while recommending treatment to the fewest number of people (12.9% versus 17.3% with Australian and British guidelines). If "optional" recommendations are included, US guidelines recommend treating about twice as many people as New Zealand guidelines (24.5% of the population), with almost no additional decrease in mortality. Similarly, studies conducted outside the United States found that targeted screening based on risk is less costly and can identify up to 84% of high-risk individuals compared with mass screening.[202]

The public health impact of widespread use of statins was evaluated with a Markov model analysis for the US population from 35 to 85 years of age.[26] Full adherence to Adult Treatment Panel III primary prevention guidelines would require starting statins in 9.7 million and increasing the dose in 1.4 million Americans. This strategy would prevent 20 000 myocardial infarctions and 10 000 CVD deaths at a total cost $3.6 billion or $42 000 per QALY if low-intensity statins cost $2.11 per pill (which is substantially higher than the cost of currently available, effective generic statins). At a $50 000 willingness-to-pay threshold, statins are cost-effective up to $2.21 per pill.

Multiple studies using mathematical models have evaluated the cost-effectiveness of statins for primary prevention of CVD within specific populations. One study reported that statin therapy is likely to be cost-effective in the prevention of CVD among Koreans ≥45 years of age, with an estimated ICER of $12 612 per QALY gained (based on 1200 Korean won per US $1), although it may be difficult to translate the findings to the United States because of differences within healthcare systems.[203] In the US population, statin therapy has been found to be cost-effective in individuals with T2DM who have LDL-C levels between 100 and 129 mg/dL, where cost and effectiveness vary among type of statin used.[204]

AQ:13

Blood Pressure Screening and Treatment

Hypertension is a major risk factor for coronary artery disease, stroke, heart failure, and renal failure.[205,206] As with lipids, multiple major clinical trials and national clinical guidelines support screening and treatment for hypertension, including both lifestyle and pharmacological therapy. The Antihypertensive and Lipid-Lowering Treatment to Prevent Heart Attack Trial (ALLHAT) study (2002) reported that thiazide-type diuretics (chlorthalidone) are at least as effective in preventing CVD as a calcium channel blocker (amlodipine) or an angiotensin-converting enzyme inhibitor (lisinopril). Thiazide-type diuretics have also been shown to be less expensive.[207,208] In an extension of the ALLHAT study, chlorthalidone was found to be more cost-effective than amlodipine and lisinopril.

Lipid and Blood Pressure Treatment

Several studies have evaluated the cost-effectiveness of the treatment of dyslipidemia and hypertension for primary prevention of coronary heart disease. In an extension of the Anglo-Scandinavian Cardiac Outcomes Trial (ASCOT), lifetime cost-effectiveness of atorvastatin plus amlodipine was the most expensive but also the most effective treatment compared with amlodipine-based therapy alone (ICER of €8591 per QALY in Sweden and €11 965 per QALY gain in the United Kingdom).[209] In Canada, both lipids and hypertensive therapy were found to be cost-effective (ICER of $16 700 and $37 100 per life-years saved, respectively), although statin treatment was less effective among women <50 years of age, as was hypertension treatment for men and women <50 and 60 years of age, respectively.[27]

Evidence is emerging on the use and cost-effectiveness of fixed-dose medication combinations ("polypill") for CVD prevention. Coadministration of atorvastatin and amlodipine for hyperlipidemia and hypertension has been found to be well tolerated and without adverse pharmacological interaction.[210] This combination was shown to be cost-effective in preventing CVD in a subgroup of Koreans ≥45 years of age without a history of myocardial infarction or stroke, with an approximate ICER of $6000 per QALY gained.[211] Newman et al[28] used a mathematical model to evaluate whether a fixed-dose medication (statin, angiotensin-converting enzyme inhibitor, thiazide diuretic, and β-blocker) would be cost-effective in the primary prevention of CVD in men ≥55 years of age without coronary heart disease, hypertension, or dyslipidemia. The decision model, which compared treatment and no treatment, considered medication costs and side effects, as well as direct medical costs and age-related health states, including morbidity and mortality from CVD. The fixed-dose medication treatment was less expensive and more effective, with an average cost of $70 000 compared with $93 000 for no treatment, and resulted in 13.62 QALYs compared with 12.96 QALYs without treatment. The authors concluded that the use of a fixed-dose polypharmacy approach to CVD prevention in men >55 years of age may be cost-effective.

Making the Case for Prevention to Policy Makers

The policy landscape for CVD prevention is active with considerable potential to improve health. The challenge is how to translate biological science, economic analysis, and behavioral science into policy that supports the promotion of heart health and the prevention of CVD. Brownson et al[212] describe the parallel worlds of researchers and policy makers and the diffi-

culty in connecting the two. One of the challenges described is timing. Whereas researchers' time frame is longer term with studies and analysis and publishing, the time frame of the policy maker is related to election cycles. With regard to primordial and primary prevention of CVD, the tyranny of the urgent, the acute stroke or myocardial infarction that evolves over minutes, can seem more important than the much slower, but potentially far more substantial, benefits of effective prevention strategies (ie, the rule of rescue). However, targeted population-level prevention policies can have a measurable impact even in the short time frame of policy makers.

Convincing policy makers of the importance of prevention has less to do with whether they believe prevention works and more to do with whether they believe prevention programs are effective and provide value. As previously discussed, standard cost-effective analyses are difficult to conduct, with considerable uncertainty about outcomes that occur over a period of decades. And certain types of savings are difficult to measure accurately. The interventions selected must provide evidence of improved outcome at an acceptable cost (ie, that they provide value). The assessment of cost and benefits must include the cost of intervention and anticipated reductions in medical care costs, as well as value in the workplace and society by having a healthier population and workforce.

From a government policy perspective, support for prevention policies and the necessary appropriations that support prevention can be difficult to garner when resources are limited. Congressional Budget Office scoring does not reflect long-term savings or savings that cannot be accurately measured.[213] In addition, the Congressional Budget Office considers only costs or savings to the federal government, so a program with a broader societal benefit, fiscal or otherwise, may not seem to show a positive return on investment. The Congressional Budget Office has outlined the challenges in assessing the cost savings of prevention, noting that achieving substantial savings in healthcare spending or federal outlays from prevention initiatives may take years of costly intervention and a variety of approaches to succeed; even if these initiatives change people's behavior, the resulting health benefits may take a long time to emerge, so the immediate impact on health spending may be limited; and the long-term savings on health care from reductions in the incidence of illnesses and disabilities may be substantial, but any savings to the federal government could be offset at least partially by additional expenditures as healthier individuals live longer. For example, Medicare costs could rise for the treatment of other diseases and conditions during those extra years of life, and expenditures for programs that are not directly related to health (such as Social Security) could also increase as lifespans are extended.[213] The challenge is to convince policy makers that although there may not be significant net cost savings in the short term to society (or even long term to the federal government), there is value in making an important investment in the health of our nation.

Another challenge is that the healthcare system responsible for public medical care (eg, Medicare and Medicaid) and private medical care is seen as distinct from public health rather than as an integrated system. Furthermore, the healthcare system separates the biological from the psychosocial in the socioecological model that takes into account the influence of social, cultural, and physical environments on individual and population health.

Translating evidence into policy is not as simple as knowing the science. At least 4 requirements must be satisfied to effect policy change. The policy maker has to be convinced that there is a theoretical basis for successful outcomes, that the policy is a practical one to pursue, that it is an affordable or a worthy investment, and that it is reasonable politically to pursue the new policy. In addition, in an environment of limited resources, activities undertaken must be viewed as an appropriate role of government versus the individual.

Those hoping to effect policy change must be able to articulate a rationale for policy change that, in the case of the primordial and primary prevention of CVD, adheres to the following principles: a robust evidence base on quality of life and/or prevention of future events, the impact of the health of the population on healthcare costs and medical care delivery, and the positive influence on the nation's productivity and long-term national security. In summary, the practical benefits of policies that should be adopted will promote health and prevent disease and disability with benefits accruing to both individuals and society.

Future Research Directions

By several indexes, healthcare expenditures continue to rise at the fastest rate in our history. According to a recent projection, total healthcare spending will approximate $4 trillion in 2015, or 20% of the gross domestic product, corresponding to $1 of every $5 spent in the United States.[214] This growth in healthcare spending is clearly not sustainable, making cost-effective prevention of disease a national priority. Future research in prevention should routinely include economic studies. Potential areas include the following:

- Serial assessment of participants in behavioral or multicomponent trials to confirm maintenance of the treatment effect and to assess longer-term outcomes
- Evaluation of the role of technology in facilitating and supporting lifestyle change interventions
- Assessment of motivational interviewing and related behavior-change techniques, including the impact of motivational interviewing strategies delivered in primary care settings
- Clarification of the independent and additive benefits of lifestyle modification on cardioprotective pharmacotherapies and vice versa
- Evaluation of the effects of moderate versus vigorous physical activity, with specific reference to the associated benefits, risks, and long-term compliance
- Evaluation of the advantages and limitations of selected environments to deliver primordial and primary preventive interventions, including the home, community, worksite, school, and healthcare system
- Clarification of the impact of excise taxes on the consumption/use of unhealthy foods, sugary beverages, and tobacco products
- Testing of the thesis that we are initiating treatment of hypercholesterolemia (and other risk factors) too late in life, particularly among adolescents and young adults with

high lifetime risk, clarifying the potential benefits, harms, and costs of initiating lifestyle modification interventions, drug therapy, or both early in life[199,200]

- Research on the role of genetic testing in developing more personalized approaches to prevention
- Methodological research on better approaches to evaluating value of preventive services

The medical and research communities are challenged to further clarify the effectiveness and sustainability of cost-effective preventive cardiovascular services so that proven interventions can be provided in home-, work-, school-, and community-based settings to save lives, money, and resources. AQ:14 Legislators, public health and planning professionals, and community representatives can help to facilitate this objective by supporting selected advocacy initiatives and empowering localities to embrace a lifestyle culture of physical activity, healthy nutrition options, smoking bans, and affordable access to health care for all Americans. The American Heart Association has developed initiatives to foster the development of a healthier population, including Go Red for Women, Power to End Stroke, Alliance for a Healthier Generation, and Start!

Cardiovascular disease is largely preventable. The mortality from CVD has fallen by two thirds since the peak in the 1960s, resulting in an unprecedented increase in longevity.[215] Approximately 55% of this decrease has been attributed to primary and secondary prevention because of improved management of cholesterol, blood pressure, and tobacco use. These gains have been offset in part by increases in obesity and diabetes mellitus.[215] These improvements have occurred despite a relatively modest investment in prevention compared with the management of acute disease. Much is yet to be accomplished to optimize the health and productivity of our nation by the economically advantageous development of healthy lifestyles, including diet, tobacco avoidance, and physical activity, and appropriate pharmacological therapy for hypertension, hyperlipidemia, tobacco cessation, and diabetes mellitus. A population with optimal health will be developed through the sustained and coordinated efforts of an informed citizenry, community participation, and the medical care system. Given the high cost of treating acute and chronic disease, prevention offers the potential of both improving health and decreasing costs.

Appendix

Primer on Cost-Effectiveness Analysis

Background on Economic Analyses

In evaluating societal choices concerning prevention, the initial and long-term direct costs and induced costs or saving of services are AQ:15 important considerations (see Table 1 for a glossary of terms). Given that society cannot afford unlimited medical services, all forms of care should compete for resources on the basis of effectiveness and cost. In choosing services, whether preventive or therapeutic, consumers will look to obtain value (ie, that the service is worth what is paid for it). The perspective in economic analyses will have an important impact on the assessment of value. For instance, an analysis from the perspective of a health system might not include the long-term consequences of a particular clinical strategy, whereas this issue may be vital to patients. In addition, the indirect, or nonmedical, costs or consequences are not always factored into the cost analysis. The perspective of all of the various stakeholders may be viewed in aggregate as "society." To be most useful in serving societal goals, economic analyses should be performed from a societal perspective in which an attempt to measure all of the costs and effectiveness measures associated with a particular treatment is made.[216] These costs should include those incurred by the patient, the costs of medical resources that could have been used for other patients, and any loss of income that the patient sustained because of poor health, as well as the loss of income for those who may have provided informal care to the patient. Outcomes should include events, quality of life, and survival. By evaluating the sum of all of these costs in relation to outcomes, a policy maker could decide, for example, whether the public good benefited more by allocating limited healthcare resources to preventive services or to new therapies for incident or prevalent diseases.

Determining Costs

Costs may be considered from one of several possible perspectives.[217] For hospitals, costs are their expenses related to providing a service. For payers, cost is the funds transferred to a provider or providers for services rendered plus administrative expenses. In principle, cost studies generally seek to determine societal costs, which can be used in cost-effectiveness analyses to gain the widest perspective. However, societal costs are never directly measurable; thus, combinations of cost proxies from one or several stakeholders, when measurable, are used as estimates.

Costs are often classified as direct or indirect.[218] Theoretically, direct costs are those incurred by a stakeholder for a therapy or test, and indirect related costs are those incurred by other societal groups. More commonly, direct costs relate to the provision of medical care, whereas indirect costs are nonmedical costs such as travel and related societal costs. Indirect costs reflect lost patient or business opportunity and may be referred to as productivity costs.[219]

Another issue involved in measuring hospital costs is average versus marginal or incremental cost.[220] Average cost is calculated by dividing all costs for a service by the total number provided. In contrast, the marginal cost is the cost of the next similar procedure. Average costs include all resources used, including overhead, with AQ:16 associated costs that would not be decreased if not used. Marginal costing accepts fixed costs as a given and focuses only on variable costs or those additional resources consumed by each additional patient. Variable costs are analytically separated from fixed costs by establishing the perspective and time frame as fixed. Because of difficulties in assessing marginal cost, most cost and cost-effectiveness studies use average costs.

Future costs should be discounted to reflect the opportunity costs of current dollars; that is, future costs should be expressed at their present value.[216] For instance, if a policy maker were given the alternative of spending $1000 now or $1000 in 5 years to treat a given condition and obtain the same outcome, the decision would always be the latter. Costs are generally discounted at a rate of 3%/y to 5%/y.[216]

Determination of Patient Utility and QALYs

In the treatment of CVD, it is unusual for 1 measurement of outcome to be of sufficient clinical importance that all other outcome measures may be ignored in clinical decision making. Although death generally overwhelms all other outcome measures in importance, patients may also suffer from considerable disability. Thus, a therapy may be justified on the basis of improved health status alone, even if not lifesaving. To incorporate health status measures into a cost-effectiveness analysis, an overall measure of health status is needed. In principle, this task may be accomplished through the determination of patient utility. The utility of a therapy or test is the sum of effects, both positive and negative, that accrue to a patient over time as the result of the procedure.[221] More technically, utility is a measure of patients' preferences for one health state over another.

Utility may be measured indirectly using either a validated survey such as the Health Utilities Index[222] or the EQ-5D[223] or by directly AQ:17 assessing patient preference. The patient preference methods, Standard Gamble and Time Trade-Off,[224] ask patients to directly evaluate their current state of health and what they would give up or risk to achieve optimal health. The patient preference methods are probably superior to surveys because the evaluation of a patient's view of his/her own state

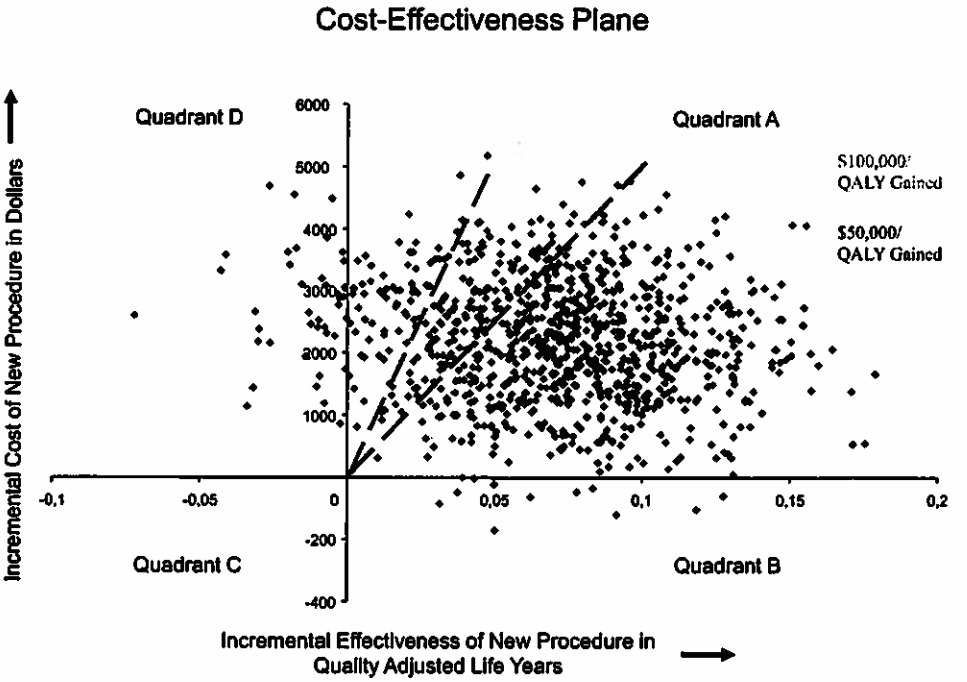

Figure 2. The distribution of cost-effectiveness in the cost-effectiveness plane. Each point represents an estimate of the incremental cost-effectiveness ratio based on dual bootstrap of cost and efficacy. Potential $50 000 and $100 000 per quality-adjusted life-year (QALY) gained threshold lines are noted. Estimates of the incremental cost-effectiveness ratio below those benchmarks would be considered cost-effective.

of health is measured directly; however, they are more difficult to administer. In the Time Trade-Off approach, patients weigh the fraction of expected survival they are willing to give up to achieve optimal health. With the Standard Gamble, patients weigh what risk of death they are willing to take to achieve optimal health. The Standard Gamble is probably superior because it includes the element of risk.

Utility alone does not provide a final summary measure of outcome because it does not include life expectancy. A summary measure can be created by combining utility and survival to obtain QALYs.[225] Survival, as with cost presented above, is generally discounted, which means that patients value a year of survival at the present time more than a year of survival in the future. The "true" discount rate for survival is unknown. Values in the literature for the discount rate have varied from 2% to 10%, with 3% being the most popular, and it should be discounted at the same rate as cost.[216] Thus, with a discount rate of 3%, next year's survival is 3% less important than this year's survival. The QALY is the best summary measure of outcome in a cost-utility analysis because it incorporates patient value, risk aversion, expected survival, and a discount rate.

Cost-Effectiveness and Cost-Utility Analysis

Cost-effectiveness analysis is by its nature incremental. Thus, it is necessary to evaluate both added cost and effectiveness compared with a control group. At times, the appropriate control is no procedure or test (eg, a placebo in pharmaceutical trials); at times, the current standard procedure (ie, the appropriate control) depends on the clinical question being asked. It is also necessary to consider the time horizon of a study. In principle, a lifetime horizon is preferred because it incorporates all downstream resource use and events.

When additional costs and incremental measures of effectiveness of a new form of therapy are available, along with description of the distribution of each, then an ICER may be calculated, along with its own distribution.[226] An ICER is a ratio of the incremental cost of the new therapy divided by the incremental measure of benefit. When the measure of benefit is expressed in life-years or QALYs, then the ICER will be measured in cost per life-year or QALYs gained.

The ICER should not be viewed only as a single number because of the uncertainty about measures of both cost and effectiveness. The first level of uncertainty is based on chance or sampling error alone. This may best be considered when patient-level data are available. The distribution of an ICER based on sampling error of the numerator and denominator is somewhat complicated because the 95% confidence interval of a ratio is not easily defined. A popular approach to this problem is to examine the confidence interval of cost and effectiveness by sampling from the distribution of each, an approach called bootstrap analysis. By sampling from both the cost and effectiveness distributions concurrently, one can make multiple estimates of the ICER.[227] The distribution of the ICER may then be displayed in a plane (Figure 2), where each point is an estimate of the ICER. In quadrant A, the new therapy is more effective but more costly than the previous standard. In quadrant B, the new therapy dominates the standard, being more effective and less expensive, whereas in quadrant D, the new therapy is dominated by the standard, being less effective and more expensive.

Cost-effectiveness analysis will almost always include a series of assumptions because it is generally not possible to accurately measure all variables necessary for a definitive analysis. In addition, even when measurements are available, they may not adequately represent values appropriate for the analysis at hand. Thus, cost-effectiveness analysis generally includes sensitivity analyses in addition to the stochastic estimates of variation discussed. With sensitivity analysis, the input variables for assessing both cost and effectiveness are varied between reasonable limits, and the ICER and its distribution are recalculated.

An ICER is an assessment of the cost-effectiveness of one treatment or test versus another; it does not say whether a service is cost-effective, and there is no scientific basis for a threshold below which an ICER must be for a new therapy to be considered cost-effective. The $50 000 per QALY threshold has been widely used because it is based on renal dialysis, and in the United States, there is general (political) agreement that there is willingness to pay for renal dialysis. Although a threshold gives cost-effectiveness studies a benchmark that may be used to compare studies, there is no scientific justification for selection of any one threshold; indeed, the optimal threshold for cost-effectiveness is a sociopolitical decision. A cost-effectiveness threshold then is an assessment of value that might vary by payer, patient, or provider.

Disclosures

T4–5.AQ:19 **Writing Group Disclosures**

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This table represents the relationships of writing group members that may be perceived as actual or reasonably perceived conflicts of interest as reported on the Disclosure Questionnaire, which all members of the writing group are required to complete and submit. A relationship is considered to be "significant" if (a) the person receives $10 000 or more during any 12-month period, or 5% or more of the person's gross income; or (b) the person owns 5% or more of the voting stock or share of the entity, or owns $10 000 or more of the fair market value of the entity. A relationship is considered to be "modest" if it is less than "significant" under the preceding definition.

*Modest.

†Significant.

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*Modest.

†Significant.

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