



The First Delaware State Health Improvement Plan

Forces of Change Assessment

September 28, 2012



DELAWARE HEALTH AND SOCIAL SERVICES

Division of Public Health

CONTACT INFORMATION

Paul Silverman, Dr. P.H.

Associate Deputy Director for Health Information and Science
Delaware Department of Health and Social Services, Division of Public Health
417 Federal Street, Jesse Cooper Building
Dover, DE 19901
Office: 302.744.4703
Fax: 302.739.4784
paul.silverman@state.de.us

Kimberly Swanson

Project Manager, APS Healthcare
10 East Doty Street, Suite 210
Madison, WI 53703
Office: 608.258.3350
kswanson@apshealthcare.com

Vikrum Vishnubhakta

Consultant, Forward Consultants on behalf of APS Healthcare
350 South Hamilton Street, Suite 506
Madison, WI 53703
Office: 608.208.1670
Fax: 608.338.0426
vikrum@goforwardconsultants.com

CITATION

The Division of Public Health will be acknowledged when the report is quoted or referenced using the following format: "Delaware Health and Social Services, Division of Public Health, Forces of Change Assessment, September 28, 2012."

TABLE OF CONTENTS

INTRODUCTION	4
FORCES OF CHANGE	4
Economic	4
Environmental	5
Ethical	6
Legal and Political	6
Scientific	6
Social.....	7
Technological.....	8
Table 1. Threats and Opportunities of Delaware’s Forces of Change	9

INTRODUCTION

The *Forces of Change Assessment* identifies the external factors, trends, and events that will likely affect the health of Delaware residents and the State of Delaware's public health system. This assessment is one of four assessments in the Mobilizing for Action through Planning and Partnership (MAPP) process. The MAPP process is a community-driven strategic framework that was developed by the National Association of County and City Health Officials (NACCHO). The aim of the MAPP process is to improve health and quality life in Delaware through strategic planning.

In this assessment, eight categories of forces – economic, environmental, ethical, legal, political, scientific, social, and technological – were meticulously examined to comprehensively answer the following questions:

- What is occurring or might occur that affects the health of our community or the local public health system?
- What specific threats and/or opportunities are generated by these occurrences?

The Delaware MAPP Committee, a diverse group of community and public health leaders, met in July 2012 to help build this assessment. A brainstorming session and discussion were held to review important forces as well as the threats and opportunities associated with each force. Each MAPP member was asked to identify the three forces that he or she believes will most impact the health of Delaware communities and its public health system. Responses were collected and included in this assessment. The forces identified here and the results of the other three assessments will serve as the foundation for identifying Strategic Issues, the next step in the MAPP process.

FORCES OF CHANGE

Included below are the eight categories of forces, with the specific factors, trends, and events that were identified by the Delaware MAPP Committee as influencing Delaware's health system and community health. Table 1 details the most influential and prominent forces in Delaware with the associated threats and opportunities.

Economic

Committee members named the weak economy to be one of the top three most influential forces on Delaware's health. Eighteen (18) of the 32 committee members included economic factors in their lists, with the weak national economy listed as the most commonly named force. Other influential economic forces include business development, unemployment, budget cuts, and limited funding.

The weak national economy affects the health of Delaware communities because fewer resources exist to sustain and/or expand health programs and services. According to the Bureau of Labor Statistics,

*Delaware Department of Health and Social Services, Division of Public Health
The First Delaware State Health Improvement Plan
Appendix E: Forces of Change Assessment, September 28, 2012*

12.7 million American are unemployed as of the spring of 2012,¹ corresponding to a large number of individuals as uninsured or unable to afford health care. As of May 2012, over 30,000 individuals were unemployed in Delaware.² Uninsured individuals often cannot pay for health care, and instead, rely on social services or public emergency rooms as their source of health care.³ Individuals without health insurance face substantial barriers to receiving adequate care, which ultimately affects their overall life experiences as compared to individuals who are insured for most of their lives.⁴

Like the global and national economy, Delaware's economy has experienced a downward trend. According to one of Delaware's MAPP Committee members, "the loss of several large businesses and industries within the state presents the threat of increased unemployment and a depressed local economy." Opportunities to invest in or grow in-state businesses and industry will have an encouraging effect on overall community health. Accounting for economic forces that affect the local community will be a vital element toward developing a sound strategic health improvement plan.

Environmental

Pollution and environmental degradation affect individual and community health. Examples of environmental forces include climate change, air pollution, damaged watersheds, and contaminated ground water. All of these factors can cause serious health issues. For example, findings from the National Environmental Public Health Tracking Network at the U.S. Center for Disease Control and Prevention (CDC) show increasing rates of asthma among Delawareans from 10.4 percent of adults diagnosed with asthma in 2000 to 14.3 percent in 2008.⁵ As with the case of rising asthma cases and other health conditions, Delaware must take action to address these environmental-related health issues.

According to research by the U.S. Environmental Protection Agency, children may suffer disproportionately from environmental hazards, especially during early developmental periods.⁶ Increased exposure to chemicals and pollutants via air pollution has been linked to increased hospitalizations, cardiovascular disease, and other unfavorable health outcomes.^{7,8,9} Limiting exposure can help reduce many of these health issues.⁷ Mitigating exposure to pollution represents an important factor in how the State of Delaware can shape community health and protect children.

Through concerted efforts to provide clean and safe places to live, environmental design emerges as an instrumental method toward ensuring robust health in a community. Research by the Prevention Institute looked at how improvements in the built environment positively influenced the health of the community. Examples included jogging paths, community gardens, and murals in urban areas.¹⁰ The built environment was also identified by a number of MAPP members as an important force in Delaware. One member saw changes in the built environment as an "opportunity for state and community leaders to capitalize and strengthen the environmental assets." By understanding these

environmental factors and trends, Delaware can be a leader in building clean safe intentional communities that foster good public health.

Ethical

Ethical forces were not identified as having as much influence on Delaware's health. However, ethical factors are related to other forces and it is important to understand how health care ethics impact these issues. Rationing care, or the allocation of health resources, is an important factor on issues relevant to access to care.¹¹ Poor and underserved communities are most affected by rationed care because these individuals are less able to afford the same type of care as individuals with a higher socioeconomic status.¹² Social and economic disparity further influences an individual's ability to utilize the health system.¹³ These concepts permeated the discussions on the other forces.

Legal and Political

Legal and political forces are highly interconnected, given that health care legislation is highly linked with political discourse. The MAPP committee members identified health care reform and implementation as the third leading influential force after social forces and economic forces. The Affordable Care Act has the potential to bring about substantial changes in the national and state health systems. While opportunities are present in improving access to care and efficiency in the health system, implementing changes in these realms will likely be challenging and costly.

Currently, health care is a highly charged political issue. With upcoming elections and bipartisan views on the issue, health care legislation will likely continue to change. The legislative reforms around health care may also greatly impact how states and communities deliver services to their residents. The Delaware MAPP Committee members articulated that an understanding of the political climate of the community and state government will help inform how the public health system can adapt to the changes.

Another important legal force identified by the MAPP committee was the use of public health legislation. Policy changes around public health issues, such as such as taxes on tobacco or regulation of healthy school lunches, have been effective in improving population health.¹⁴ Challenges exist in the passing of public health legislation but such policies should be considered as a powerful tool toward enhancing community health.

Scientific

While advances in medicine and health research have produced many new drugs and improved procedures, scientific factors were not considered by the MAPP Committee to be in the top of Delaware's list of influential forces. Scientific advances in medical research have the ability to impact

individual and community health but ensuring equitable and safe access to these advances can often be a social issue.

Research on evidence-based medicine continues to grow and inform to improve delivery of care. Comparative effectiveness studies also provide scientific evidence of best medical procedures and interventions. The National Institutes of Health has allocated over \$300 million in comparative effectiveness research that can be used to advance clinical care.¹⁵ One committee member noted the connection between the bioscience industry and the economy. Understanding how scientific forces relate to other social and economic factors will allow Delaware to address threats and opportunities.

Social

The Delaware MAPP Committee named social forces as the most influential type of force. Among the 96 forces named by the committee, 51 forces were in the social category. The most common social forces named were the aging population, socioeconomic disparity, education and health workforce development, violence/community safety, and mental health services.

The health of the state will be affected as the social and economic demographics of Delaware change over time. Committee members cited that the state's growing elderly population will likely require more specialized care such as hospice nurses, assisted living facilities, and transportation assistance. Addressing the needs of this growing population may require changes and restructuring of the current state public health system. Delaware will also need to address widening health disparities between racial groups for chronic health problems such as obesity, diabetes, and heart disease.¹⁶ With changing demographics and a widening gap between the socioeconomic and racial groups, more programs will need to focus on decreasing the those disparities.

Education and training the health workforce was also identified as an important social force. Without an in-state medical, dental, or public health school, Delaware faces challenges in training and retaining health professionals. Strengthening undergraduate health programs and expanding partnerships with nearby schools will be important to develop Delaware's next generation of professional health leaders. Educating the general population about healthy behaviors and lifestyle changes is another factor that could improve community health. Community safety and mental health services were the other commonly named social forces. Maintaining safe communities and providing necessary mental health services will be essential toward ensuring the health of Delawareans.

These social forces can have a great impact on community and individual health in Delaware. As budgets for social programs and services are cut, it will become more difficult for state and local agencies to provide vital public health services. Collaborations and partnerships with community groups

can help extend services and reach underserved populations. Delaware's changing demographics, community safety, and educational issues should be incorporated into the state's strategic health plan.

Technological

Technological advances serve as another force affecting the health of Delaware communities. Access to communication technology such as smart phones, wireless tablets, and laptops changes how people work together and receive information. These advances will be important for improving and extending the reach of important public health messages and health information. While the Delaware MAPP Committee chose not to include technological factors as a top priority, it was noted that technology could improve information sharing within the health system. By using electronic health records, providers and patients will benefit by greater ease and access to health records. Moreover, committee members believed that with the right strategies, health information technology could have the potential to positively influence individual and community health.

Table 1. Threats and Opportunities of Delaware’s Forces of Change.

Forces	Threats Posed	Opportunities Created
Economic		
Weak Economy	Increase in number of unemployed and underemployed.	Motivation for entrepreneurship.
	Strain on social safety net programs.	Improve the resource allocation.
	Increase in number of uninsured and underinsured.	Increase partnerships and collaborations.
	Increase in foreclosures and housing issues.	Increase low cost and innovative social support.
	Mental health issues.	[None Defined]
Environmental		
Pollution and Environmental Degradation	Pollutants cause health problems such as cancers and neurological disruptions.	Clean and redesign public spaces and parks.
	Particularly damaging to children and the elderly.	Enact stronger environmental protection legislation.
	Contaminates water supply.	Increase community value by improving environment.
	Lasting damage to environment, animals, and plant life.	[None Defined]
Built Environment	Limited options for affordable housing.	Develop safe public spaces to encourage active lifestyles.
	Lack of affordable transportation options.	Provide walking, jogging, and biking trails.
	Lack of well-designed public spaces for recreation.	Improve transportation options and make community life more accessible.
Ethical		
Rationing Care	Leads to more inequality and disparity.	Decreases unnecessary health procedures and tests.
	Insurance companies limit coverage of needed care.	Contributes to lower health care costs.
	Disproportionately affects low income and lower educated groups.	Improves the standard of care through evidence-based practice.
Legal		
Legislative Health Care Reform	Difficulty implementing new requirements.	Collaborate to comply with requirements of electronic health records (EHR).
	Confusion about new systems for patients and care providers.	Increase in access to care for more people.
	Cost of implementing new requirements.	Improve the quality of care. Create a more efficient and equitable system.

Forces	Threats Posed	Opportunities Created
Political		
Elections 2012	Changes in foreign relations, social policies and health care.	Changes in foreign relations, social policies, health care.
	Depending on election outcome.	Depending on election outcome.
Reduced Funding for Social Services and State Programs	Less money available for direct services and prevention programs.	Shift responsibility of some programs to private sector or nonprofit agencies.
	Decreases support system for high-risk and high-needs populations.	Increased incentive to collaborate between offices and programs.
	Spend more time seeking grant funding.	Streamline services and decrease wasteful spending.
	Job loss that affects the infrastructure of social systems and public health programs.	Create new systems to reach more clients efficiently.
Scientific		
Advances in Medical Care	Increase in cost for health care.	Improve health care services and treatment.
	Increase in demand.	Better health outcomes.
	Unnecessary use of technology.	[None Defined]
	Unequal access to advances.	[None Defined]
Social		
Socio-Economic Disparity	Widens the gap between the "haves" and "have-nots."	Form partnerships to offer more opportunities to underserved and under resourced communities.
	Poor health and economic outcomes for more people.	Increase in wealth among some people.
	More children and families with unmet needs.	Improve systems to equitable distribute resources and services, particularly to hard to reach groups.
Aging Population	Ageing work force.	Improve collaboration of services.
	Increase in need for caretakers and hospice.	Coordinate Medicare and social services.
	Increase in costs associated with end-of-life care.	Improve palliative care and end of life care.
Education and Health Workforce Training	Shortage of trained health professionals.	Partner with nearby out-of-state professional health schools.
	Poor health outcomes related to lack of education.	Strengthen in-state undergraduate health workforce training.
		Improve health education services to lay population.
Safe Communities and Mental Health Services	Strain on mental health services and social systems.	Increase community safety coalitions.
	Increase in community violence and homicides.	Improve access and availability of mental health services.

Forces	Threats Posed	Opportunities Created
Technological		
Information Technology	Increase in chance of misinformation.	Improve ability to communicate with larger audience.
	Difficult to control messages.	Multiple communication tools to reach people.
	People ignore important health communication messages.	Improve communication between health professionals and within the health system.
	Overwhelming amount of information makes it difficult to filter through fact and fiction.	Partner with community groups and professionals to provide valid and credible messages.

REFERENCES

- ¹ Bureau of Labor Statistics. Employment Situation Summary, June 1, 2012. Retrieved from: <http://www.bls.gov/news.release/empsit.nr0.htm>.
- ² Bureau of Labor Statistics, Economic News Release, Table 3 Retrieved from: <http://www.bls.gov/news.release/laus.t03.htm>.
- ³ Collins, S., Robertson, R., Garber, T., Doty, M. (2012). The Income Divide in Health Care: How the Affordable Care Act Will Help Restore Fairness to the U.S. Health System. Issue Brief: Commonwealth Fund, 3, 1-24.
- ⁴ Institute of Medicine, Committee on the Consequences of Uninsurance, Care Without Coverage: Too Little, Too Late. Washington, D.C.: National Academies Press, 2002.
- ⁵ Center for Disease Control and Prevention, National Environmental Public Health Tracking Network. Retrieved from: <http://ephtracking.cdc.gov/showLocationLanding.action>.
- ⁶ Environmental Protection Agency, Health and Safety. Retrieved from: <http://yosemite.epa.gov/ochnpweb.nsf/content/fastfacts.htm>.
- ⁷ Samet, J., Zeger, S., Dominici, F., et al. (2000). The National Morbidity, Mortality, and Air Pollution Study. Part II: Morbidity and mortality from air pollution in the United States. *Res Rep Health Eff Inst*, 94, 5-70.
- ⁸ Miller, K., Siscovick, D., Sheppard, L., Shepherd, K., Sullivan, J., Anderson, G., Kaufman, J. (2007). Long-term exposure to air pollution and incidence of cardiovascular events in women. *NEJM*, 356, 447-45.
- ⁹ Pope, C., Burnett, R., Thun, M., et al. (2002). Lung cancer, cardiopulmonary mortality, and long-term exposure to fine particulate air pollution. *JAMA*, 287, 1132-1141.
- ¹⁰ The Prevention Institute, The Built Environment and Health. Retrieved from: http://www.preventioninstitute.org/index.php?option=com_jlibrary&view=article&id=114&Itemid=127
- ¹¹ Cassidy, J. (1988). Access to Health Care: A Clinician's Opinion about an Ethical Issue. *Am J Occup Ther*, 42, 295-299.
- ¹² Smedley, B., Stith, A., Nelson, A., eds. Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare. Washington, DC: National Academies Press: 2003.
- ¹³ Siegel, S., Moy, E., Burstin, H. (2004). Assessing the Nation's Progress Toward Elimination of Disparities in Health Care: The National Healthcare Disparities Report. *J of Gen Int Med*. 19(2). 195-200.
- ¹⁴ Mozaffarian, D., Afshin, A., Benowitz, N., Bittner, V., Daniels, S., Franch, H., Jacobs, D., Kraus, W., Kris-Etherton, P., Krummel, D., Popkin, B., Whitsel, L., Zakai, N. (2012). Population Approaches to Improve Diet, Physical Activity, and Smoking Habits: A Scientific Statement from the American Heart Association. *Circulation*, [Epub ahead of print].
- ¹⁵ National Institutes of Health, Health Services Research Information Center. Retrieved from: <http://www.nlm.nih.gov/hsrinfo/cer.html>.
- ¹⁶ Delaware Health Tracker. Disparity Dashboard. Retrieved from: <http://www.delawarehealthtracker.com/modules.php?op=modload&name=NS-Indicator&file=index&topic=0&group=category&breakout=all>.