Journal of Urban Health: Bulletin of the New York Academy of Medicine, Vol. 82, No. 2,
doi:10.1093/jurban/jti042
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Advance Access publication May 12, 2005

ORIGINAL ARTICLES: VARIOUS TOPICS

Shortchanged? An Assessment of Chronic Disease Programming in Major US City Health Departments

Mari Georgeson, Lorna E. Thorpe, Mario Merlino,
Thomas R. Frieden, Jonathan E. Fielding, and
The Big Cities Health Coalition

ABSTRACT *A self-administered survey was distributed to members of The Big Cities Health Coalition, a group of Health Officers/Commissioners from 17 of the largest US metropolitan health departments. The survey asked participants about their chronic disease priorities, data sources, budgets, and funding sources as well as examples of successful chronic disease interventions. Members of the Coalition discussed the survey results in a scheduled conference call. Chronic diseases account for 70% of all deaths nationwide on average, yet the health departments surveyed allocated an average of 1.85% of their budgets to chronic disease. Average chronic disease spending per inhabitant was $2.33, with a median of $1.56. Among the group's top chronic disease priorities were asthma, diabetes, tobacco, cancer, and cardiovascular disease (CVD). Nearly half of the group's chronic disease spending was on tobacco. Chronic disease funding sources varied across localities, but direct federal funding was minimal. In 14 cities serving a combined 37 million people (13% of the US population), direct federal chronic disease funding totaled $8.7 million, an average of $0.24 per capita. The group described successful chronic disease interventions, particularly related to tobacco and asthma.*

KEYWORDS *Chronic disease, Funding, Public health practice, Urban health.*

Ms. Georgeson, Dr. Thorpe, Mr. Merlino, and Dr. Frieden are with the New York City Department of Health and Mental Hygiene, New York, New York; and Dr. Fielding is with the Los Angeles County Department of Health Services, Los Angeles, California.

Correspondence: Mari Georgeson, MA, New York City Department of Health and Mental Hygiene, 125 Worth Street, Room 624, New York, NY 10013. (E-mail: mgeorges@health.nyc.gov)

The Big Cities Health Coalition members: John M. Auerbach, MBA (Boston Public Health Commission); Peter Beilenson, MD, MPH (Baltimore City Health Department); Matthew Carroll, AB, JD (Cleveland Department of Public Health); Mary DesVignes-Kendrick, MD, MPH (Houston Department of Health and Human Services); John F. Domzalski, JD, MPH (Philadelphia Department of Public Health); Franklin Judson, MD (Denver Public Health Department); Mitchell H. Katz, MD (San Francisco Department of Public Health); Alonzo Plough, PhD, MA, MPH (Seattle / King County Public Health); Eleni Sfakianaki, MD, MSPH (Miami-Dade County Health Department); Adewale Troutman, MD, MPH (Fulton County Department of Health and Wellness); Jonathan B. Weisbuch, MD, MPH (Maricopa County Department of Public Health); Judith West, MPH (Detroit Department of Health); John L. Wilhelm, MD, MPH (Chicago Department of Public Health); Steve Wilson, MD, MPH (Dallas County Department of Health and Human Services).

INTRODUCTION

Chronic diseases such as heart disease, cancer, and diabetes are the leading causes of death and disability in the United States, accounting for 70% of all deaths and greatly affecting the health of millions.[1] For most of these diseases, a significant fraction of deaths is preventable. The promotion of healthy behaviors such as avoiding tobacco use and other addictive substances, being physically active, and controlling blood pressure, cholesterol, and blood sugar can prevent or control much of the illness and premature death associated with many major chronic illnesses.

Although chronic diseases are common, and the burden they place on health care is costly, local health departments in the United States have traditionally focused primarily on the surveillance and control of communicable diseases.[2] The extent to which local health departments currently address or prioritize chronic diseases is unknown. In January 2003, senior staff members from health departments in 17 of the country's largest municipalities were invited to attend a conference call to discuss their various experiences addressing chronic diseases. Before the call, participants completed a survey regarding the extent to which their programs, funding, and research addressed chronic diseases. A summary of findings from the survey and call is presented here.

METHODS

Participants on the call were members of The Big Cities Health Coalition. Formed in November 2002, the Coalition provides a forum for Health Officers / Commissioners to regularly share best practices and exchange information. The cornerstone activity of the Coalition is a quarterly conference call where specific health topics are discussed. The Coalition consists of Health Officers / Commissioners from the following cities: Atlanta, Baltimore, Boston, Chicago, Cleveland, Denver, Dallas, Detroit, Houston, Los Angeles, Miami, New York City, Maricopa County (the greater Phoenix area), San Francisco, Seattle, Philadelphia, and Washington, DC. The Coalition's first conference call was held on January 23, 2003; the topic was chronic diseases.

Staff members from the New York City Department of Health and Mental Hygiene developed the survey and distributed it before the call (see Appendix). The survey consisted of 13 questions asking participants about their agency's top three chronic disease priorities, allocated budget for chronic disease prevention and control, funding sources, most useful data tools, and examples of successful chronic disease programs. Health department staff members were asked to provide approximate information about their chronic disease programs. Line-item budget or precise health data were not requested because the survey was intended to be a rapid assessment of what actions large local localities are taking to address chronic diseases rather than an in-depth description of particular health departments.

Chronic disease was specifically defined for the purposes of the survey. In general, chronic diseases tend to have the following characteristics: uncertain etiology, multiple risk factors, long latency period, a prolonged course of illness, noncontagious origin, functional impairment or disability, and incurability.[3] For the purposes of the survey, disease areas and related risk factors that were emphasized were cancer, cardiovascular disease (CVD), diabetes, asthma, nutrition, physical fitness, obesity, and tobacco use. Related areas such as most direct primary health care services, mental health, dental health, school health, and substance abuse (other than tobacco)

were excluded from the definition both to maintain focus and because municipalities vary to a great degree in the extent to which they participate in these activities.

Results of the survey were compiled and distributed to participants before the call. During the call, participants discussed the results and delineated successes and challenges in chronic disease surveillance and control.

RESULTS

The survey was completed by 14 of the 17 (82%) Coalition departments. Table summarizes the results of the first question, which asked the size of the population served by each of the health departments. Some departments serve the population of one city, whereas other departments serve larger metropolitan areas or counties.

Priorities

Participants were asked to name their top three chronic disease priorities. In descending order, the most frequently mentioned priorities were asthma (8) and diabetes (7), followed by tobacco (6), cancer (6), and CVD (6). Also mentioned were obesity (3), physical activity (2), nutrition (2), and getting more health from medical care dollars (1).

Participants were asked which data tools they had access to and which were most useful. The most useful data tools for chronic disease, according to the group, were vital statistics data (6), local surveys (5), Behavioral Risk Factor Surveillance System (BRFSS) or community BRFSS (local surveys modeled on BRFSS) (4), emergency department data (4), Youth Behavioral Risk Factor Surveillance System (3),

TABLE. Size of population served and size of chronic disease budget, by metropolitan health department, 2003

Health department	Total population served by the agency	Budget for chronic disease ($)	Percentage of total department budget	Budget per population served ($)
Baltimore	650,000	515,830	0.3	0.79
Boston	600,000	3,500,000	3	5.83
Chicago	3,000,000	1,000,000	0.7	0.33
Cleveland	478,000	125,000	0.8	0.26
Dallas	2,200,000	0	0	0
Detroit	951,270	3,100,000	3	3.26
Houston	1,954,000	89,500	0.1	0.05
Los Angeles	9,700,000	6,852,800	1.2	0.71
Miami	2,200,000	1,250,000	2.1	0.57
New York City	8,000,000	14,139,667	1.1	1.77
Philadelphia	1,500,000	9,106,000	1	6.07
Maricopa County	3,200,000	5,000,000	10	1.56
San Francisco	790,000	5,800,000	0.6	7.34
Seattle	1,800,000	5,000,000	2	2.80
Atlanta	Data not available			
Denver	Data not available			
Washington	Data not available			
Mean		4,231,551	1.85	2.33
Median		3,500,000	1.05	1.56

hospital discharge data (2), census data (1), and Community Health Information System (1).

Funding

Chronic disease spending as a percentage of total department budget ranged from 0% to 10%, with a mean of 1.85% and a median of 1.05%. Average chronic disease spending per inhabitant was $2.33, with a median of $1.56. Total chronic disease spending per inhabitant ranged from $0.00 in Dallas to $7.34 in San Francisco. Although spending by disease and risk factor area varied greatly, spending on tobacco control was generally higher than spending for other chronic disease programs. Eleven of twelve respondents to this section of the survey reported some spending on tobacco control, and tobacco control activities comprised close to 50% or more of the departmental chronic disease budgets of Maricopa County, Los Angeles, Chicago, Cleveland, and Miami. Some spending was reported for asthma (10), CVD (9), cancer (7), and diabetes (6). Grouped together, nearly half of the chronic disease spending is on tobacco (Fig. 1).

Funding sources varied greatly between departments (Fig. 2). For example, chronic disease spending in Detroit was more than 90% locally funded, whereas Baltimore was entirely federally funded, and Maricopa County and Houston were all state funded.

Best Practices

In the survey and on the call, participants were asked to share best practices and what they considered success stories. Smoking interventions were a success story for most of the participants and were mentioned by eight departments (Los Angeles, Boston, Miami, Maricopa County, New York City, San Francisco, Philadelphia, and Seattle).[4] Successes included legislation (smoke-free communities and higher taxes on cigarettes), education, cessation programs, increased retail enforcement (prevention of tobacco sales to minors), research, and epidemiology (surveys). Several cities reported dramatic decreases in adult and youth smoking.

Successful asthma interventions were related by five departments (Boston, Chicago, New York City, Philadelphia, and Seattle). Successes included community education

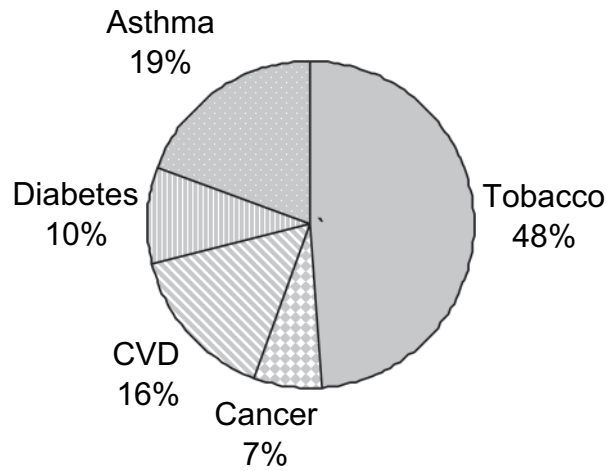

FIGURE 1. Total chronic disease spending (12 cities) by disease area.

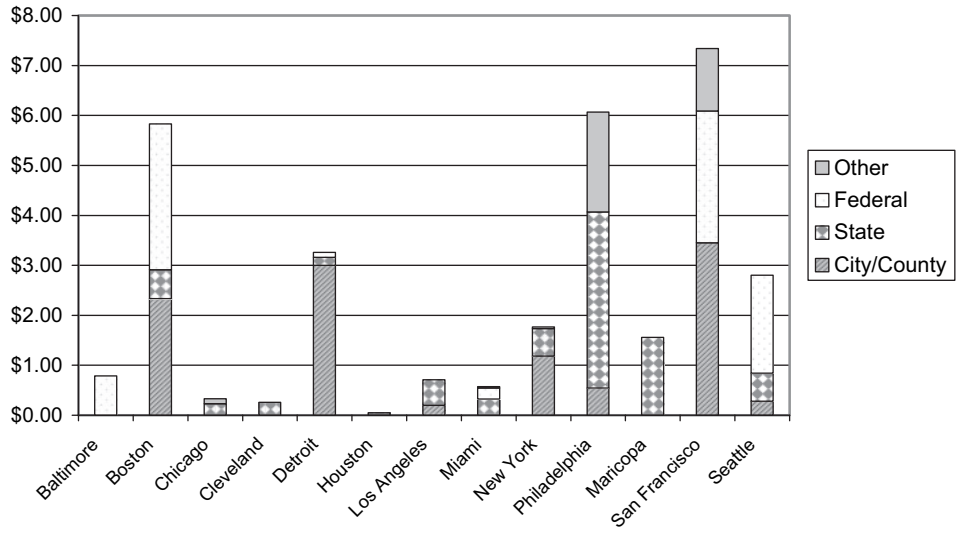

FIGURE 2. Per capita spending by funding source.

and outreach (including screening and working with families to reduce environmental triggers and promote appropriate use of medication), provider education, surveillance, partnership development and collaboration (with schools, hospitals, community organizations, etc.), case management, legislation (mandatory reporting of emergency department data), and an increase in the ratio of preventive to acute medication prescriptions for asthma, coinciding with a reduction in emergency department visits.

Four cities listed successes in CVD/diabetes/nutrition/exercise (Boston, Detroit, Philadelphia, and Seattle). Interventions included neighborhood walking teams, nutrition outreach focused on women and children, neighborhood miniproduce markets, monthly produce markets, classes on how to control hypertension and diabetes, diabetes outreach focusing on minority groups, diabetes registry, and blood pressure tests given to asymptomatic people accompanying patients to clinics.

Philadelphia mentioned successful cancer control programs, such as a breast and cervical cancer screening and treatment grant and increased produce stands in low-income neighborhoods to encourage the consumption of fruits and vegetables.

DISCUSSION

Funding levels for chronic disease programming in our nation's largest local health departments, while variable, typically make up less than 2% of department budgets. Collectively, the 17 city health departments that are represented in The Big Cities Health Coalition have 39 million people in their jurisdiction, more people than any state in the US and 14% of the US population.[5] Of the 14 cities that responded to the survey, only 7 reported receiving any direct federal funding for chronic disease prevention and control. Often, this money is secured through competitive grants. There was a tendency for those municipalities receiving federal dollars to have higher per capita spending on chronic disease. Most cities received some state assistance, although dollars defined as state dollars may in fact be provided to states by

the federal government and then redistributed to municipalities. The significant tobacco control spending reported here likely reflects cigarette excise tax revenues and funds received under the Master Settlement Agreement of 1998. However, since this survey was administered, funds have declined. In 2003, tobacco control programs received 3% of the total states' share of Master Settlement Agreement funding, a decrease from the 5% allocation of the previous 3 years.[6]

Although the 14 responding cities serve a combined 37 million people (13% of the US population), total direct federal chronic disease funding was only $8.7 million, or $0.24 per capita—representing 1.2% of total chronic disease funding nationally.[7] This low level of funding represents a missed opportunity. Local health departments have direct contact with large numbers of people and well-established intervention channels, including direct services to high-risk populations and, often, a daily presence in schools. The health care and school systems are two of the most effective channels for chronic disease interventions.[8] Local health departments also have experience working with local media, local government, and community organizations—all key partners in preventing and controlling chronic disease. Direct federal funding mechanisms for local or large municipal health departments are few, with the recent STEPS to a HealthierUS being one of the first federal Request for Applications targeting large municipalities and other areas for chronic disease intervention programming.[9]

Despite limited resources for chronic disease programming, many of the participating municipalities have made significant strides. Many communities have succeeded in passing legislation establishing smoke-free workplaces and other public spaces, and many departments have asthma management programs. Program improvements and increased policy focus are needed in the areas of school health and worksite wellness as well as cancer and CVD screening, prevention, and control. Chronic diseases now account for 75% of all health care costs in the United States.[10] Local and, in particular, municipal health departments need infrastructure for addressing chronic disease similar to the one that has served us so well for communicable disease—one with federal and local support.

APPENDIX

The survey given to participants (with number of respondents)

1. What is the size of the total population that your health department serves? (n = 14)
2. How many staff are working on chronic disease? (n = 13)
3. What is the total budget for chronic disease? (n = 14)
4. What percent of total department budget goes to chronic disease? (n = 14)
5. What programs do you include in chronic disease? That is, what programs are you including for the purposes of this questionnaire, wherever they happen to be located in your department? (e.g., tobacco, diabetes, asthma) (n = 13)
6. What are your top three chronic disease priorities? (please list priorities in order) (n = 13)
   a. _____
   b. _____
   c. _____
7. What data tools do you rely on? (e.g., Behavioral Risk Factor Surveillance System) (n = 12)
8. What are the most useful data tools? (n = 12)
9. Please provide a summary (e.g., 2–3 sentence) of one or more successful chronic disease programs. (n = 12)
10. How much of chronic disease budget goes to the following areas? (approximate percentages) (n = 10)

Appendix ***Continued***

Funding area	Percentage
Media	
Surveillance and research	
Programming	
Others (specify)	

11. Where does chronic disease funding come from? (approximate percentages) (n = 13)

Funding source	Percentage
City	
State	
Federal	
Others (specify)	

12. How is chronic disease budget allocated as far as disease areas? (approximate percentages) (n = 12)

Disease/condition	Percentage
Tobacco	
Cancer	
Cardiovascular disease	
Diabetes	
Asthma	
Others (please specify)	

13. Any other comments:

ACKNOWLEDGEMENT

The authors thank the following staff members of the New York City Department of Health and Mental Hygiene: Tamara Dumanovsky, PhD, and Clara Soh, MPA, for their helpful review and comments and Sarah Perl, MPH, for her assistance in the early conceptualization of the Coalition. They also thank the staff at the agencies comprising the Coalition for generously sharing information about their efforts, successes, and challenges in chronic disease prevention.

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