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SINAI HEALTH SYSTEM

IMPROVING
COMMUNITY HEALTH
SURVEY

REPORT I

JANUARY 2004



This report was produced by:

SINAI URBAN HEALTH INSTITUTE

Steven Whitman, Ph.D., *Principal Investigator*
Cynthia Williams, M.S., *Co-Principal Investigator*
Ami M. Shah, M.P.H., *Project Director*

With extensive contributions from:

Abigail Silva, M.P.H.
Jocelyn Hirschman, M.P.H.
Helen Margellos-Anast, M.P.H.
Jade Dell, M.A.

Send comments, questions and requests for additional copies to:

Ami M. Shah, Project Director
Sinai Urban Health Institute
Mount Sinai Hospital
1500 South California, K-439
Chicago, IL 60608
773-257-6569 (phone)
773-257-5680 (fax)
shaam@sinai.org
<http://www.sinai.org/urban/index.asp>

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Sinai Health System's
IMPROVING COMMUNITY
HEALTH SURVEY

REPORT I

JANUARY 2004





Sinai Health System

To Our Colleagues in Public Health and Medicine:

Through its more than 80 years of existence the Sinai Health System (though not always called that) has opened its doors to all comers, including the most vulnerable and dispossessed among us. It is, we believe, the only way to act toward our neighbors who welcome us into their communities. Exactly who those neighbors are has changed over time, but Sinai's underlying ethic has not.

Another constant during this time has been our belief that treating and healing people while they are within our walls addresses only part of the problem of ill health. It is also necessary to understand the interaction of their communities with their health. To improve our efforts at pursuing this understanding, the Sinai Health System created the Sinai Urban Health Institute (SUHI) in March of 2000. One of the main goals of the Institute was to bring knowledge about those factors impacting on community health into sharper focus. This they have done with substantial success. Initially, SUHI published health profiles of the two community areas with which we work most closely, North Lawndale and South Lawndale. The epidemiologists in SUHI followed up these reports with articles published in prominent public health journals uncovering and illuminating the large racial disparities that exist in many measures of health in Chicago. The more we learned, the more we knew we needed to learn about those factors which impact on health among the people and communities we serve.

As we tried to understand what lay beneath the information on birth and death certificates, we were surprised that not much was available at the community level. For example, what proportion of people in these communities smoke? What proportion is obese? What proportion is depressed? We quickly learned that such information existed at the national and state levels, but was by and large unknown at the local level. This was problematical because national (or state) estimates of these factors are actually averages of many local communities together. What they say about each community is limited and may be misleading.

We thus decided to conduct a community health survey. We applied for and were fortunate to obtain a grant from the Robert Wood Johnson Foundation, the world's largest health foundation, to conduct this survey. How we went about conducting this survey and what we found as a result are contained in the following pages.

Although implemented with the most modern technology this work is nonetheless steeped in the long, proud history of our medical center. We believe the results from this survey will help improve the health of the communities we serve and of many more like them across the country. These are our next steps and we should expect no less of Chicago's public health and medical communities.

We are pleased and honored to have been able to facilitate this work.

Sincerely,

A handwritten signature in black ink, appearing to read "Benn Greenspan".

Benn Greenspan, Ph.D.
President and CEO

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Executive Summary

Introduction

This report presents ten key findings from what is likely the largest door-to-door, community health survey ever carried out in Chicago. It was conducted by Sinai Health System's research arm, the Sinai Urban Health Institute and describes findings from 1,700 scientifically selected households in six Chicago community areas. Many of the findings from the survey reveal dramatic, never-before-known information about the health and well-being of the residents of the city. Many of these findings are startling in their comparison to national statistics, citywide statistics and what was formerly known about health disparities across racially/ethnically diverse Chicago communities. More importantly, this report offers insights about steps that should be taken to improve health, steps that can serve as a starting-point for a more thoughtful and collaborative process to occur over the course of a series of health symposia in 2004. These include policy initiatives, ways of improving medical care, changing individual behaviors, and developing a wider context for understanding societal factors that influence our health.

Motivation for this Study

Much information that is important in describing health is not readily available and so surveys are frequently conducted to collect this information. Some are conducted for the country as a whole, some are conducted on a state-by-state basis, and a few are available to describe the health of counties or cities. No survey data are routinely gathered to describe health at the local level. Yet it is at the community level that health improvement interventions are best implemented. This leaves those of us who want to understand the health of communities at a substantial disadvantage. If we don't understand the health of local communities, and what issues impact on this health, then it is difficult to develop effective interventions to improve the health and quality of life of Chicago residents. It thus becomes very difficult to set priorities and targets to direct these efforts where they are most needed, create community-level solutions that respond to the beliefs and every-day realities of local residents, and identify and decrease health disparities wherever they exist.

This is especially important in a big city of distinct neighborhoods like Chicago because much information

and many health services in the city are arranged according to 77 community areas (as designated by sociologists at the University of Chicago more than 60 years ago and recognized officially by the city of Chicago and virtually all public health organizations). Health in these local areas varies a great deal. Thus, what is true for Chicago as a whole is not necessarily true for each community area. In fact, studies we have carried out at the Sinai Urban Health Institute demonstrate that even adjacent communities, like North Lawndale and South Lawndale, may differ substantially in many aspects of health. Failure to appreciate these differences is an invitation to fail in trying to improve the health of Chicago residents.

It was with this in mind that we decided to implement a door-to-door household survey of selected community areas in Chicago. We applied for a grant to conduct this work and were fortunate to receive funding from The Robert Wood Johnson Foundation. The work funded by this grant had two main goals:

- To document the health status of selected community areas that reflect the diversity of Chicago and the other major cities in the U.S.;
- To use this information to improve access to health care and the delivery of health services; attract additional resources; and stimulate new, collaborative efforts to improve the health of Chicago residents.

Methodology

Six community areas were selected for this study. They are North Lawndale, South Lawndale, Humboldt Park, West Town, Roseland, and Norwood Park. Four of these are located slightly west of the downtown area, one is on the far south side and another is on the far north side. These communities were chosen because they represent the rich racial, ethnic, and socioeconomic diversity of Chicago.

A survey design committee (SDC) was organized to select the topics that would appear on the survey. The SDC consisted of community members who were affiliated with social service agencies, government and educational programs, and other local community-based organizations. Three vice presidents of the Sinai Health System also served on the SDC. The SDC met bi-weekly

for three months. Ultimately, the committee members agreed on a final list of topics for the survey, with 469 questions in the Adult Module and 144 in the Child Module. These topics can be categorized as follows:

- health conditions (e.g., hypertension, depression, other chronic conditions)
- health behaviors and attitudes (e.g., eating habits, tobacco or alcohol use, and physical activity)
- health care access (e.g., insurance coverage, having a primary care physician)
- quality of life (e.g., perceived stress, self-rated health)
- and other social or environmental factors (e.g., perceived racism, violence, acculturation).

The questions were selected (whenever possible) to be comparable to questions asked on national and state surveys. This would suggest that they were valid and would also allow us to make comparisons with the data we obtained from these six community areas.

Respondents were chosen by first selecting census blocks from each community area, then households from each block, then adults and children from each household. Households were chosen in a scientific manner to try to guarantee that those selected would be representative of each community area in the survey. Interviews were conducted in the homes of the respondents in either English or Spanish. The survey required about an hour. Each household was given \$40 for completing the adult portion of the survey and \$20 for the child portion. A substantial packet of health literature was also left with each household.

The survey was conducted between September 2002 – April 2003. A total of 1,699 adult interviews and 811 child interviews were completed.

Results

The basic demographics of the respondents were similar to those indicated by the 2000 Census (Section 2). Almost all the respondents in North Lawndale and Roseland were African American, in South Lawndale were Mexican and in Norwood Park were White. In Humboldt Park about half were African American, a quarter were Mexican and a quarter were Puerto Rican. In West Town about half were White, a quarter were Mexican and a quarter were Puerto Rican.

Key findings from the survey are presented in this report as ten separate (though inter-related) topics. For each

topic we present background, survey data and related policy considerations.

Topic 1. Insurance Status and Access to Care

The proportion of residents in each of five community areas (all except Norwood Park) with any form of health care coverage (either private or public) was substantially lower than the national average, even when adjusted for race and ethnicity. Disparities were also evident in the proportion of insured children.

Only 44% of people in South Lawndale and 60% of people in Humboldt Park and North Lawndale reported currently having any type of health insurance (Figure 1.1, page 13). This is well below national proportions of about 85 – 90%. As a result of this lack of insurance, many respondents report not being able to afford needed medications or being able to see a dentist when needed (Figure 1.3, page 15). They also report receiving fewer preventive services such as blood pressure screening and mammography (Figure 1.4, page 15).

Policy Recommendations

We are the only industrialized country in the world without a universal health care plan. Analysis of our findings suggests that many health problems are exacerbated by the absence of health care coverage and that access to care is essential to good health. We recommend that such a universal plan be adopted in the United States. Additionally, as has happened in other states, Illinois legislators have the opportunity to address this problem by voting for the Bernardin Amendment or some similar piece of legislation, which would establish a standard of decent health care for everybody in Illinois.

Topic 2. Diabetes

Our survey not only discovered that the prevalence of diagnosed diabetes in two of the six communities was elevated compared with national and Chicago levels, but that, in South Lawndale, an alarming contrast existed between the prevalence of diagnosed diabetes and the diabetes mortality rate.

Consistent with many national surveys, we asked, “Have you ever been diagnosed with diabetes?” Proportions saying “yes” to this question in Humboldt Park (14%) and Roseland (14%) were elevated beyond national and Chicago findings (7% and 5%, respectively, (Figure 2.1, page 18)). Notably, only 3% of the people in South Lawndale, almost all of whom are Mexican, reported

such a diagnosis. When this finding is compared with rates of mortality from diabetes, the contrast is striking since South Lawndale has a high rate of mortality from diabetes. In 1999 – 2000 the diabetes mortality rate in South Lawndale was 40 (per 100,000 population) compared to 31 in Chicago (Figure 2.2, page 19) and 25 in the United States.

Policy Recommendations

We would first like to prevent the onset of diabetes and if we cannot, we would like to treat it effectively. This implies the need for access to quality medical care, sound protocols for detecting and treating diabetes, and good follow-up including insurance supported education and behavioral intervention. Our findings suggest that a lack of access to such primary, preventive care is a prominent part of the problem in South Lawndale. The information gathered in this survey is a call for a comprehensive outreach program to screen and treat people for diabetes before it is too late for them. An essential factor in the lack of diabetes screening in South Lawndale may be related to the low rate of insurance coverage in that community (44%).

Topic 3. Smoking

The survey found very high proportions of people who are current smokers in North Lawndale, Humboldt Park, Roseland, and West Town – some on the order of twice as high as national and Chicago statistics. Thus, there is a very serious smoking problem in these community areas. In addition a large proportion of these smokers said that they wanted to stop and were trying to stop.

The survey asked adults if they were currently smoking. When this question is asked of national samples, about 23% of adults say “yes” whether they are men or women or Black, White, or Hispanic. A phone survey conducted in Chicago found that 21% of people said “yes” to this question. These numbers may be contrasted with the fact that in our sample 39% of the people in North Lawndale smoke, 35% in Humboldt Park, 33% in Roseland, and 32% in West Town (Figure 3.2, page 22). These are very large proportions, on the order of twice as high as national and Chicago-wide results. It is also important to note that more than half of the smokers were trying to stop (Table 3.1, page 22).

Policy Recommendations

First, we recommend that more of the Tobacco Settlement Funds awarded to Illinois (about \$9 billion over about

30 years or about \$350,000,000 per year) actually be spent on smoking prevention or, at the very least, spent on the resulting ill health. Second, we recommend that the funds be targeted to those communities in greatest need, some of which are clearly indicated by the results from this survey. Third, we recommend that targeted and effective counseling and behavioral interventions be made reimbursable by health insurance. This would surely facilitate the provision of such smoking interventions. Currently, if a clinician spends time with a patient in such an activity, there is no reimbursement and thus only charitably subsidized behavioral counseling is minimally available.

Topic 4. Adult Asthma

The survey found the prevalence of diagnosed asthma to be twice the national average in some communities surveyed, reminding us again of the very serious problem of asthma in large cities in general and Chicago in particular. Also striking was the high proportion of people with active asthma who have never received an action plan about what to do when one’s asthma acts up (a component of the 10 “key clinical activities” prescribed by the National Asthma Education and Prevention Program). Further, though smoking often triggers asthma attacks, we found very high smoking rates among people with asthma.

We asked adult respondents “Have you ever been diagnosed with asthma?” While nationally about 11% (in 2000) said “yes” to this question, in some communities we surveyed, twice the proportion of respondents (18% – 19%) answered “yes” (Figure 4.1, page 25). When people whose asthma was currently active are asked if they had ever received an action plan to manage their asthma, the proportion in each of our sampled communities with such a plan is quite low. North Lawndale (62%) and West Town (61%) show the highest proportions, yet even these are very far from the goal of 100% (Figure 4.2, page 26). Finally, we note the high smoking rates in some of the communities in general, and among people with asthma in particular. In five of the six communities the rate of smoking in people with asthma is higher (Figure 4.3, page 26) than the national smoking rate for all adults (23%). Furthermore, in four of the six communities we studied, people with asthma smoke at a higher rate than people without asthma!

Policy Recommendations

We recommend that there be a citywide campaign to educate physicians on the importance of asthma

action plans, and an effort by insurers to promulgate existing protocols of successful care. Medical centers and doctors' offices could conduct chart audits to determine to what extent their patients were receiving such plans. We also recommend that asthma education be delivered more often when clinicians are treating people for their condition. In order to allow this to happen we recommend that there be reimbursement for health education and case management for asthma. Finally, we recommend that every effort be put forward to help people with asthma who smoke to stop this most harmful habit.

Topic 5. Pediatric Asthma

Our survey revealed extraordinarily high proportions of children with asthma, quite likely the highest ever documented, in several of the communities surveyed.

We pursued the determination of how many children (12 years of age and under) had asthma through two sets of questions. First, we asked: "Has your child ever been diagnosed with asthma?" Then we also asked a series of four questions that have often been used to screen for pediatric asthma. The proportions of children likely to have asthma (diagnosed or screened positive) reach 28% in Humboldt Park and West Town, and 23% in North Lawndale and Roseland (Figure 5.1, page 29). When we look at the data arranged by race and ethnicity (Figure 5.2, page 30) we see that Puerto Rican children have the highest pediatric asthma rate (34%).

On April 19, 2003, the *New York Times* ran a front page story about a study of children in Harlem that found that "One of every four children in central Harlem has asthma, which is double the rate researchers expected to find and, researchers say, is one of the highest rates ever documented for an American neighborhood." Note that for the children in most of the communities we surveyed, and especially for Black and Puerto Rican children, the rates are even higher than 25%. Thus, what is front-page news in the *New York Times* is every-day reality for the children in these Chicago communities.

We also found that children with asthma are twice as likely to visit the emergency room as children without asthma (Figure 5.3, page 30) and that a large proportion of children (nearly half in some communities) are regularly exposed to secondhand smoke (Figure 5.4, page 31).

Policy Recommendations

As has been found in study after study, morbidity and

mortality from childhood asthma disproportionately impacts upon urban areas, with Chicago always showing up as one of the hardest hit cities. We do not know why children initially acquire asthma but we do know how we can keep them from getting seriously ill. Every family with a child who has asthma should have an asthma action plan, receive comprehensive education about how to use asthma medications, have appropriate case management and be able to contact a clinician 24 hours a day. Such services have been found to save unnecessary and expensive trips to the emergency room. Finally, a major targeted education campaign should be initiated throughout the city to explain and emphasize the damage done to children with asthma by secondhand smoke.

Topic 6. Depression

A very high percentage (32%) of our sample had experience with depression. We approached the determination of who was depressed through two strategies. First, we used the common survey question: "Have you ever been diagnosed as being depressed?" Then we used the Depression Scale of the Center for Epidemiological Studies, which consists of ten questions about depressive symptoms in the past week. We found that overall 7% were diagnosed with depression but did not screen positively for it, 16% screened positively but had never been diagnosed, and 9% were both diagnosed and screened positively. Thus, a very high one-third (32%) of our sample had experience with depression. Well over half of all people who screened positively for depressive symptoms had never received a diagnosis for depression (Figure 6.1, page 34). This is a dreadful under-diagnosis of a very serious condition, which can often be successfully treated if detected. There were, of course, important variations in these proportions according to community area (Figure 6.2, page 35).

Policy Recommendations

Mental illness such as depression is no less real than any other physical illness, but health insurance plans typically do not give it equal coverage. Depression ought to be addressed like other illnesses and suitable reimbursement ought to be provided for all. In order to overcome the cultural barriers to seeking treatment for depression and other mental illnesses, primary care providers must also be recruited and properly trained to screen for mental illnesses as part of the overall physical. When necessary, physicians must know when and where to appropriately refer people for further care. Finally, it should be noted that programs that provide individual and family

counseling at alternative venues (i.e., community centers, religious centers) can be important tools for both improving outreach and challenging stigma.

Topic 7. Adult Obesity

The most commonly accepted technique for measuring the extent of obesity is body mass index (BMI), which is derived from a formula that takes account of both height and weight. A BMI between 25 and 29.9 means that the person is “overweight.” A BMI greater than or equal to 30 means that the person is “obese.” Our survey found that the proportion of people who are obese in the following community areas is very high – 41% in North Lawndale, 38% in Roseland and 35% in Humboldt Park (Figure 7.1, page 37). These numbers may be compared with 24% for the United States and 25% for Chicago. In addition, we asked survey respondents how they perceived their weight. The proportion of overweight or obese people who perceived themselves to be either the “right weight” or underweight was about 20% for all six community areas (Figure 7.3, page 38).

We also examined the relationship between BMI and some other measures developed in the survey. For the whole sample combined, 14% of people who are not overweight have high blood pressure, compared with 25% of those who are overweight and 44% of those who are obese. Thus we see that a high BMI is a powerful risk factor for hypertension. There is a similarly strong relationship between BMI and diabetes, arthritis, and depression (Figure 7.4, page 39).

Policy Recommendations

Many actions are needed to help lower obesity in Chicago’s adults. First, we need more opportunities for exercise, including safer parks and streets, more bicycle paths and more workplace exercise options. Second, we should encourage appropriate portion control size and reject the “super-sized” portions that confront us everywhere we turn. Third, we have to encourage doctors to learn more about nutrition and exercise and teach them how to teach their patients about this matter. Fourth, we have to call upon those who weigh more than is healthy to combat this problem by eating less and exercising more. We also have to help people learn about optimal body sizes and shapes. Finally, it is well established that people of color suffer from the highest rates of obesity. We must eliminate those societal issues, like racism, violence and the commercial red-lining of communities that impact disproportionately on these groups. For example, it cannot be accepted that there are so many communities in which there are so few supermarkets.

Topic 8. Pediatric Obesity

We know that pediatric obesity is a national epidemic that is growing worse each day. The data from this survey show that the statistics for pediatric obesity in our sample areas of Chicago are even worse than they are for the United States as a whole, or for New York City, or for Chicago as a whole.

Almost two out of every three children (63%) in the five heavily minority community areas (excluding Norwood Park) were either overweight or obese (Figure 8.1, page 41). Comparisons with similar studies suggest the seriousness of the problem. For example, 20% of Black school aged children nationally and 23% of Black children in New York City are obese (Table 8.1, page 42). These numbers are correctly considered high. However, compare them with 52% in North Lawndale and 51% in Roseland.

Policy Recommendations

We must encourage interventions that will help children in Chicago to adopt a wholistically better lifestyle – one with more physical activity, less time in front of televisions and computers, and better access to healthy foods. We also call upon the Chicago Public Schools to serve more nutritious meals, to withdraw unhealthy snacks and unhealthy drinks from vending machines and replace them with healthier foods and beverages. We urge the creation of public programs to help parents to educate themselves about the issue of pediatric obesity and to assist their children with issues that lead to overweight and obesity. Finally, we encourage people interested in this area to work closely with efforts like the Consortium to Lower Obesity in Chicago’s Children.

Topic 9. HIV/AIDS

Respondents were asked: “Have you ever been tested for HIV, the virus that causes AIDS?” A substantial proportion of people said “yes” to this question in most of the surveyed community areas. These proportions are higher than national averages. They are also consistent with which communities are hardest hit by the epidemic (Figure 9.1, page 45).

We also asked respondents if they favored or opposed the distribution of information about HIV/AIDS and STDs in schools. Surprisingly, virtually everyone in all surveyed communities favored the distribution in high schools and a huge proportion, often over 90%, favored distribution in elementary schools (Table 9.1, page 46). Astonishingly,

similarly high proportions of people supported the distribution of condoms in high schools.

Finally, we asked “Do you favor or oppose putting a needle exchange program in your community, which would offer clean needles to IV drug users in exchange for dirty needles?” The proportions here were also quite high, ranging from a low of 58% in North Lawndale to a high of 74% in West Town (Table 9.1, page 46). It is important to realize that the responses to all these questions took place without any prior education for this survey. That is, no one went into the communities and held seminars or workshops on any of these topics in order to encourage a particular opinion.

Policy Recommendations

It is essential to note that the responses to these questions are overwhelmingly different from the general perceptions of policy makers and school officials about what people want or think. As just one example, we can see from the information here that virtually everyone favors the distribution of HIV/STD literature in high schools (and the vast majority favors such distribution in elementary schools as well). A similarly large proportion of respondents favor the distribution of condoms in high schools. The survey has thus located an important confluence of factors: public opinion and the best scientific information we have urge us in the same directions:

- HIV/STD information must be readily available in the schools – high school as well as elementary schools;
- condoms should be distributed in high schools;
- there should be more needle exchange programs in vulnerable communities.

These steps will allow us to more effectively combat the HIV/AIDS and STD epidemics.

Topic 10. Health-Related Quality of Life

The World Health Organization of the United Nations says that “Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.” Since people generally only go to the doctor when they feel sick (and even then only if they are fortunate enough to be able to afford it), relying solely on clinical diagnoses as measures of health is inadequate. Doing so underestimates the true burden of poor health in the community. Existing research has demonstrated that an individual’s subjective assessment of his/her own health is a useful measure of their state of complete

physical, mental, and social well-being.

One way we measured health-related quality of life (HRQOL) was by asking respondents, “Would you say that in general your health is excellent, very good, good, fair, or poor?” There was extraordinary variation in the proportions of people who rated their health as only fair or poor. Most significantly, people living in South Lawndale are seven times as likely to report fair/poor health as those in Norwood Park (51% vs. 7%; Figure 10.1, page 48). Notably, we have seen that respondents in South Lawndale appear to be under-diagnosed on several conditions and yet they still report that their health is not good. For all communities there was a strong relationship between HRQOL and “unhealthy days” during a month. In turn, both of these measures of perceived well-being were related to several health conditions (Figure 10.2, page 49).

Policy Recommendations

HRQOL is more likely than other health outcomes to capture the burden of under-diagnosed and under-reported health conditions in a community. It is therefore a useful measure for health planners and policy makers in assuring that resources are allocated appropriately to communities. HRQOL also vividly illustrates the impact of particular diseases, such as depression, on individuals and can help planners to target funds toward health conditions that cause the greatest disability in a community. As such we recommend that these few questions be used to screen patients in clinical situations. This will allow us to accumulate a substantial database of responses among different groups in different communities in Chicago.

Racial and Ethnic Disparities

The overarching goal of our work is to understand the health of local communities and to improve our ability to effectively raise the level of health for all. Within this effort, we realize that one of the main objectives of the Healthy People Initiative (a set of about 500 goals developed by the leading national health agencies that guides much of the public health work in the United States) is to reduce and then eliminate disparities among different racial and ethnic groups. Yet, despite the effort that the nation is committing to this task, there has been little success to show for this work. In fact, disparities have been found to be worsening in Chicago, rather than improving. The findings from this survey expand our understanding of these disparities.

An ad hoc index that we created showed that Norwood Park, the predominately White middle-class community area in our survey, scored overwhelmingly the best on the health measures that are examined in this report and that Humboldt Park and North Lawndale, the two poorest community areas, almost always scored the worst. Some of the specific disparities were quite large. For example, only 4% of White people in our survey report having been diagnosed with diabetes compared with 13% of Black people – more than a three-fold difference; 34% of Puerto Rican children and 25% of Black children likely have asthma compared to 20% of White children; and an adult in North Lawndale was six times more likely to be uninsured compared with an adult in Norwood Park.

It is relevant to note here that Norwood Park is not nearly the richest community area in the city and North Lawndale is not nearly the poorest. Had we selected community areas at the extremes, the disparities almost certainly would have been far more severe.

Surely, together we must find a way to improve the health of all people and eventually arrange matters so that health and even life and death are not driven by the color of one's skin or how much money one has.

Overarching Policy Implications

We presented ten topics (sets of findings) from our survey. For each one we discussed some policy implications specific to the topic. The purpose of this section is to offer some overarching recommendations that we hope will lead us in some optimal policy directions.

- 1) We suggest that national, state, and local governments conduct local area surveys like this one on a regular basis. In an environment of financial constraint it is essential that resources be applied where they can do the most good, and with the intelligence that such surveys can provide.
- 2) We urge Chicago (and, indeed, the country) to turn its attention and resources toward prevention and screening measures rather than concentrating overwhelmingly on treatment. The costly treatment of chronic diseases eats at the fabric of our health care system. We can be better served by prevention, and early detection and intervention.
- 3) We urge investment in education of professionals and the public aimed at improving lifestyle. Incentives to avoid risky choices and encourage personal

responsibility have the potential to reshape our approach to healthy, productive life.

- 4) In order to protect the future of our communities, we urge the creation of successful initiatives that assure access to excellent health care for all children in the city.
- 5) It is well documented that health insurance disparity has an adverse effect on the health of communities. We must work to establish universal access to quality health care.
- 6) We must recognize and then eliminate racial and other societal disparities in health in Chicago.
- 7) Although structural issues like racism and poverty are responsible for many of the negative findings in this survey, we should not wait until these issues are eliminated before we act. We need to take on health issues one at a time, at the local level, beginning now, regardless of how daunting the task may seem.

Section I. Introduction

This report presents many key findings from what is likely the largest door-to-door health survey ever conducted in Chicago. Many of the findings reveal dramatic, previously unknown information about the health and well being of Chicago's residents. Data were gathered door-to-door from nearly 1,700 randomly selected households in six of Chicago's 77 community areas. Most importantly, the findings point us to steps that can be taken to improve the health status of Chicago residents. These steps include developing policy initiatives, finding ways of improving medical care, changing individual behaviors, and having a wider context for understanding the societal factors that influence our health. It is believed that findings from this survey will have both local (that is, Chicago and its communities) and national significance.

Motivation for the Study

Although some information needed to improve the health of local communities is readily available, much more is lacking. For example, public health has adequate information about mortality since we maintain good death certificate files. We also know quite a lot about births for the same reason – birth certificate files are mostly complete and contain a good deal of helpful information. The third existing source of information about the health of people comes from registries that are kept on some communicable diseases like HIV/AIDS, TB and sexually transmitted diseases (e.g., syphilis, gonorrhea, chlamydia).

The information contained in these data files can be analyzed in a number of ways allowing us to know, for example, the leading causes of death, how many babies die in the first year of life (infant mortality), how many babies are born at low birth weight, whether the syphilis rate has been increasing or decreasing, and which age group has the highest chlamydia rate. Furthermore, this information can be broken down and analyzed at the local community level so that we can begin to understand how issues related to health vary among different communities.

Unfortunately, there is a great deal of information that is not available from any of the three sources of information described above. For example, we know how many people die from diabetes each year from death certificates, yet we do not know how many people *have* diabetes, making it difficult to target interventions appropriately. We

may also want to know how many people smoke, have been tested for HIV, have asthma, are overweight, have been screened for cancer, etc. There are however no existing databases in the United States that contain this information. The only way to obtain such information is to conduct surveys and ask people directly.

As a result, many surveys are conducted in the United States to determine this type of information. Some are conducted for the country as a whole, some on a state-by-state basis, and a few are even done at the county or city level. However, no such data are routinely gathered at the (local) community level. County or city-level data may suffice in accurately representing the health status of homogenous geographic areas, but this is inadequate for diverse areas such as Chicago and most other large U.S. cities. In the latter instance, a great deal of variation may exist that is missed by city-level data. Thus, what is true for Chicago as a whole is not necessarily true for each community. In fact, studies we have carried out at the Sinai Urban Health Institute demonstrate that even adjacent communities, like North Lawndale¹ and South Lawndale,² may differ substantially in many aspects of health. This lack of local-level data leaves those of us who want to understand and improve the health of communities at a substantial disadvantage. Most importantly, if we do not understand the health of local communities, and the issues that impact on health, then we also cannot determine how best to target interventions to improve health.

It was with this in mind that the Sinai Urban Health Institute (SUHI),³ the research arm of the Sinai Health System,⁴ decided to implement a survey of selected community areas in Chicago. We applied for and were fortunate to receive funding from The Robert Wood Johnson Foundation for this work. The project, funded by this grant, had two main goals:

- To document the health status of selected community areas in Chicago;
- To use the information collected to improve health by improving health services, attracting additional resources to areas in need, and stimulating new efforts to improve health.

The survey was conducted between September 2002 and May 2003. A very substantial amount of information was

gathered and we are currently in the process of analyzing it. As we began to discuss the survey with people and presented preliminary findings at various conferences and community meetings, it became apparent that a substantial report would be useful in helping people to grasp the main findings and the overarching themes of the survey. More importantly, it is our hope that as people come to understand the data they will begin to devise ways to improve the situation of these communities and others like them.

We are therefore pleased to release the first report, *Sinai Health System's Improving Community Health Survey: Report 1* describing this survey and some of its key health findings. Given the scope of the survey and the data gathered, this is the first of a series of reports that we will produce. We plan to generate comprehensive reports for each of the six community areas that are included in this study. We also plan to produce in-depth reports on several of the individual health conditions (e.g., asthma, diabetes, hypertension) about which data were gathered. In the end we hope that this series of reports will offer a comprehensive guide to the health problems Chicago faces and what might be done to improve the health of its people.

Structure of the Report

In Section 2 we describe the study design, how the communities were selected for study, and delineate some of the social and demographic characteristics of these communities.

In Section 3 we describe how the survey questionnaire was constructed.

In Section 4 we explain how the survey data were collected, analyzed, and are presented in this report.

In Section 5 we present ten important findings from the survey.

In Section 6 we offer some observations about the vitally important matter of racial and ethnic disparities in Chicago.

In Section 7 we discuss some overarching policy implications that stem from the survey and suggest next steps.

Many Thanks

A massive project like this could not have happened without the hard work, input, support, and consultations

of many people. We will never be able to name them all but we feel we should try.

First and foremost, we thank the residents of these six communities who allowed us into their homes and were willing to spend quite a lot of time with us answering many questions and sharing their many insights.

We also wish to thank members of the Survey Design Committee who took a great deal of time out of their busy lives to help make this project a success. The work of this Committee is described in detail in Section 3.

Next, we'd like to recognize the Survey Research Laboratory at the University of Illinois at Chicago for their hard work in managing the data collection process. This project could not have been completed without the dedication shown by the interviewers who went to the households and sat and talked with the respondents, helped them feel at ease, and who elicited so much helpful information. As one of them noted, "It was sometimes difficult to get admitted to the homes. But then it was sometimes even more difficult to leave since the people had so much they wanted to tell us."

Many other individuals were of invaluable assistance in many ways. Among them were: Benn Greenspan, PhD, President and CEO of the Sinai Health System; Shirley Fleming, DrPH, RN, First Deputy Commissioner of the Chicago Department of Public Health; Debra Wesley Freeman, MSW, President and CEO of the Sinai Community Institute; and David Ansell, MD, MPH, Chair of the Department of Medicine, Mount Sinai Hospital.

We also wish to thank our colleagues at the Sinai Urban Health Institute: Christopher Clark; Jade Dell, MA; Sheena Freeman; Jocelyn Hirschman, MPH; Helen Margellos-Anast, MPH; and Abigail Silva, MPH.

Finally, we would like to thank the foundations that have supported our work in so many ways:

- The Robert Wood Johnson Foundation, for providing the funds needed to carry out the survey and to initiate policy changes and interventions to improve health based on the findings. In particular we would like to thank Dr. James Knickman (for believing that this project had potential and for giving the initial go-ahead) and Dr. Kimberly Lochner (who guided us through all the major steps leading up to funding and who has remained a consultant for us throughout).

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- The Michael Reese Health Trust, for providing continuing support and inspiration for many activities of the Sinai Urban Health Institute. The critical generosity of Dorothy Gardner, President and Elizabeth Lee, Senior Project Officer, along with their belief in Mount Sinai and our mission, could never be replaced.
 - The Chicago Community Trust, for agreeing to provide support for ongoing dissemination, policy development, and the stimulation of interventions. We especially would like to thank Ada Mary Gugenheim, Senior Project Officer, for her continuing belief in the possibility of an equitable health system.

References

- ¹ Sinai Urban Health Institute. *Chicago Community Health Profiles: North Lawndale*. Chicago, Illinois: Sinai Health System, 2001.
- ² Sinai Urban Health Institute. *Chicago Community Health Profiles: South Lawndale*. Chicago, Illinois: Sinai Health System, 2001.
- ³ <http://www.sinai.org/urban/index.asp>
- ⁴ <http://www.sinai.org>

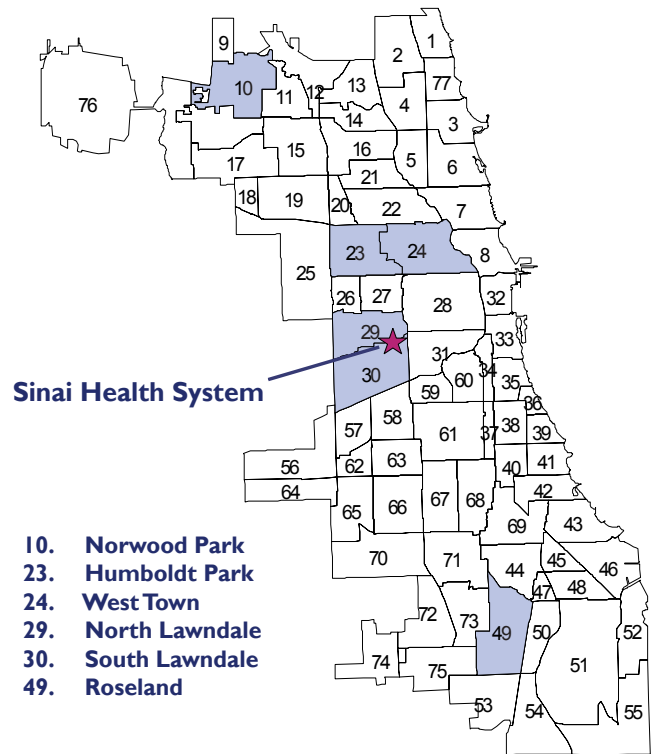
Section 2. The Communities

It was recognized from the beginning that in order to be effective, the survey would have to draw on the health measures and experiences that reflect the vast diversity of the residents that comprise Chicago's population. In 2000, Chicago was the third largest city in the United States, with a population of almost 3,000,000, consisting of 36% non-Hispanic Black (NHB) people, 31% non-Hispanic White (NHW) people, and 26% Hispanic people (of which 4% are Puerto Rican, 18% Mexican and 4% Other Hispanic). Chicago is also one of the most segregated cities in the United States, having been labeled "hyper-segregated" by a seminal study.¹ Understanding health in these diverse community areas is therefore essential.

More than 60 years ago, sociologists at the University of Chicago divided the city into 75 community areas based on social, cultural, and geographic factors (such as census tracts). These soon became officially designated and two more were added, producing a total of 77 community areas.² Six of these were selected for this survey: North Lawndale, South Lawndale, Humboldt Park, West Town, Roseland, and Norwood Park. As Figure 1 indicates, four of these communities are located slightly north and west of the downtown area, one is on the far south side and another is on the far northwest side.

Table 1 demonstrates how these communities compare with one another on basic social and demographic characteristics. North Lawndale and Roseland are almost

Figure 1. Chicago Community Area Map



entirely African American, South Lawndale is almost entirely Mexican, Humboldt Park is about half African American and half Puerto Rican and Mexican, West Town is about half White and half Puerto Rican and Mexican, and Norwood Park is almost all White. The median

Table 1. Demographic Characteristics of Six Community Areas Compared to Chicago and US, Census 2000

	Humboldt Park	West Town	South Lawndale	North Lawndale	Roseland	Norwood Park	Chicago 2000	US 2000
Total Population	65,836	87,435	91,071	41,768	52,723	37,669	2,896,016	281,421,906
NH Black ^a	47%	9%	13%	94%	98%	1%	36%	12%
NH White	3%	39%	4%	1%	1%	88%	31%	69%
Hispanic ^b	48%	47%	83%	5%	1%	6%	26%	13%
Mexican	24%	25%	76%	3%	0%	3%	18%	7%
Puerto Rican	18%	16%	1%	0%	0%	0%	4%	1%
Median HH Income (\$)	28,728	38,915	32,320	18,342	38,237	53,402	38,625	41,994
High School Graduates ^c	50%	70%	37%	60%	77%	83%	72%	80%
Unemployment Rate ^d	18%	7%	12%	26%	17%	3%	10%	6%
Individual Poverty Rate ^e	31%	21%	27%	45%	18%	4%	20%	12%

^a NH Black, NH White, and Hispanic do not add up to 100% as other racial/ethnic groups are not included in the table.

^b Mexicans and Puerto Ricans do not make up all Hispanics.

^c High school graduates among those 25 years and older.

^d Unemployment rate is the percent of resident civilians over age 16 who are without work and actively seeking work.

^e Individual poverty rate is the percent of residents with annual incomes below the federally defined poverty level in 1999.

household incomes (from the 2000 Census) for the six community areas, which range from \$18,000 to \$53,000, may be compared with about \$42,000 for the US and \$39,000 for Chicago. Overall, three of the community areas are below the median household income for Chicago and three are either at it or above (see Table 1). As can be seen, the percent of the population that is Black in each community area in general is closely correlated with median household income, the poverty rate, and the unemployment rate. Humboldt Park and West Town are undergoing rapid demographic transitions and their demographic compositions have changed notably since 1990. The compositions of the other four communities have remained stable over the past 10 years.

It is important to note that these community areas were selected to reflect the diversity of Chicago but not to be representative of the city as a whole. For example, North and South Lawndale were selected because they are neighboring communities to Mount Sinai. Humboldt Park and West Town were selected because they are both undergoing demographic transitions (and would be interesting from an epidemiological point of view) and are communities with which the Sinai Health System would like to work. Finally, Roseland and Norwood Park were selected to add both geographic and racial diversity to the survey. Thus, if we average the results of these six community areas they will not necessarily tell us about all of Chicago. Similarly, if we average the results for Black (or White or Hispanic) people in this survey they will not necessarily represent all Black (or White or Hispanic) people in the city. Saying this another way, the purpose of this study was not to assess the health of the totality of our “Big City” but rather to understand the health of specific key population groups.

Another reason that some of these community areas were selected for the survey was the strong belief on the part of their local elected officials that health conditions could and should be improved for their constituents. Several of these officials wrote letters of support for the project and have advocated for wide dissemination of the survey results. We cannot thank them enough. They are:

William Delgado
Illinois State Representative
3rd District

Roberto Maldonado
Commissioner
Cook County Board of Commissioners
8th District

Susana A. Mendoza
Illinois State Representative
1st District

Billy Ocasio
Chicago Alderperson
Chicago City Council
26th Ward

Cynthia Soto
Illinois State Representative
4th District

Arthur Turner
Illinois State Representative
9th District

References

- ¹ Massey DS, Denton NA. *American Apartheid: Segregation and the Making of the Underclass*. Cambridge, Massachusetts: Harvard University Press, 1993.
- ² The Chicago Fact Book Consortium. *Local Community Fact Book: Chicago Metropolitan Area, 1990*. Chicago, Illinois: Academy Chicago Publishers, 1995.

Section 3. Development of the Survey

Community-based participatory research (CBPR) is one approach to strategically designing and implementing initiatives to improve community health.¹ Partnering with community agencies to conduct community-based research has proven not only to be most beneficial for the quality of the research,^{2,3} but also, and more significantly, for the purpose of education and bringing about social change.⁴ In balancing research with action, CBPR demonstrates how the research process is just as important as the final outcome of eliminating health disparities because it empowers communities to plan and promote their own health.^{5,6,7,8,9} In the field of CBPR there is a spectrum of participation levels. We believe that in designing and implementing this community survey, we adhered to this methodology and benefited from the process. We also believe that with appropriate local-level data, as presented in this report, and active community participation, communities and policy makers will be armed with adequate and specific health information to guide health plans and strategically target interventions for improved health.

The Survey Design Committee

Participatory research defines a working collaboration in which those affected by an issue are involved with the generation, practice, and impact of research on policy and social change.¹⁰ A Survey Design Committee (SDC) was organized with this in mind, based on professional contacts with community leaders from the targeted community areas. The SDC was comprised of public health epidemiologists, community members and advocates, policy makers, and health administrators.

Community representatives were invited to join the SDC by the co-principal investigator of this study (CW), who is the Director of Family Education at the Sinai Community Institute, an organization that coordinates more than 25 community-based programs for the Sinai Health System. Community members were affiliated with social service agencies, government and educational programs, and other local community-based organizations from the target community areas and/or their neighboring areas. In addition to the community members, three vice presidents of the Sinai Health System were active members of the SDC. The Committee was staffed by members of the Sinai Urban Health Institute, a group of researchers at the Sinai Health System. Box I presents a list of the SDC members and their affiliations.

Designing the Survey

Regular meetings were held over 15 weeks to develop a survey instrument that would capture the social forces and individual risk factors affecting the health of people living in these community areas. Though there was no monetary incentive, the majority of the committee members attended all six meetings. When unable to attend, they often offered input via email or phone.

Box I. Survey Design Committee Members

Joe Ann Bradley
Community Action Group

Concepcion Chavarria
El Hogar del Niño

Jaime Delgado
UIC School of Public Health

Angela Ellison
Westside Futures

Jamila-Ra
Westside District Health Council

Cassandra Robinson
Chicago Youth Centers

Phil Smith
Big Brothers Big Sisters

Feliz Villafane de Palacios
Block Club Federation

Anna Yuan
Cook County Community Health Council

Ed Rafalski
Vice President, Planning

Maurice Schwartz
Vice President, Medical Affairs

Linda Miller
Vice President, Care Management
Sinai Health System

The principal investigator (SW) and co-principal investigator (CW) of the project facilitated the meetings, which initially revolved around selecting topics for the survey. Proposed survey topics included health conditions such as hypertension, asthma, and diabetes, and well-known behavioral risk factors such as smoking, alcohol, diet, and exercise. There was an energetic dialogue about the relevance of specific topics to committee members' work and the health of the communities they serve. For instance, drug abuse was presented as an issue known to be a problem in some community areas. However, it was decided by the SDC not to include this topic on the survey because they felt that adequate information about community drug use was already available and that asking sensitive questions to individuals in their homes would not be appropriate or realistic.

Similarly, the SDC agreed to keep or eliminate certain topics depending upon whether answers to specific questions seemed relevant to policy improvements or potential interventions. At the same time, many members of the committee proposed topics they felt were important to learn about, such as reusing cooking oils, grocery shopping habits, mental health services, needle exchange programs, and the use of alternative medicines. These ideas illustrate the crucial nature of tailoring the survey for the targeted communities and demonstrate the importance of involving community representatives in survey design. Many of the topic areas would have been overlooked or misunderstood had the SDC not been involved in designing the survey.

Ultimately, the committee members agreed on a final list of topics for the survey with 469 questions in the Adult module and 144 in the Child module. These topics (Box 2) can be categorized as: health conditions (e.g., hypertension, depression, other chronic conditions), health behaviors and attitudes (e.g., eating habits, tobacco or alcohol use, and physical activity), health care access (e.g., insurance coverage, use of alternative medicines, having a primary care physician), quality of life (e.g., perceived stress and anger management), and other social or environmental factors (e.g., acculturation, perceived racism, and other SES measures).

Questions for each topic were then selected or created. To ensure comparability of the survey findings with city, state, and national data, whenever possible questions were adopted from existing surveys such as the Behavioral Risk Factor Surveillance System, the National Health and Nutrition Examination Survey, the National Health Interview Survey, and the Medicare Health Outcomes Survey. Other questions came from validated

Box 2. Survey Topics

Health Conditions

- Asthma
- Diabetes
- Hypertension
- Depression
- Obesity

Health Behaviors and Attitudes

- Alcohol Use
- Tobacco Use
- Diet/Nutrition
- Physical Activity
- SIDS Knowledge
- Parenting
- HIV/AIDS

Health Care Access

- Primary Care
- Health Coverage
- Prenatal Care
- Cancer Screening
- Complementary/Alternative Medicines

Quality of Life

- Health-Related Quality of Life
- Perceived Stress
- Anger Management

Other Social and Environmental Factors

- Education
- Occupation
- Poverty
- Acculturation
- Perceived Racism
- Food Availability
- Violence

scales used in social science research (e.g., Perceived Stress Scale, Experienced Racism Scale, the Anger Scale, and the Health Related Quality of Life Scale). When questions were not readily available in the literature, such as questions on cooking habits, these were developed by the SDC drawing from its epidemiological expertise and community experience.

Each member of the committee played a critical role in the survey design. Community members brought to the table health concerns unique to residents in their

communities. They generated new ideas on potential risk factors and offered a knowledge base unknown to researchers and policy makers. Health care providers offered a service delivery angle and addressed challenges often experienced in reaching populations at risk. Finally, public health researchers contributed knowledge of existing surveys and assessment tools and skills in validating questions to ensure reliable data results.

Overall, committee members also learned from one another, which is another outcome of CBPR. Researchers and health care providers described having a unique opportunity to 'break out of the institutional' walls of research and service delivery in order to better understand the needs and experiences of those they served. They believed they gained some community perspective to conducting research. Community representatives stated that they learned how to measure health indicators and how to identify information that might be most relevant for changing policy and seeking funding.

Although some of the discussions about which topics and questions to include became energetic and even heated, collegiality and respect ruled these meetings. As a result they were always productive and effective since all were free and comfortable to speak their own minds.

References

- ¹ U.S. Department of Health and Human Services. *Healthy People 2010: Understanding and Improving Health*. 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000.
- ² Minkler M, Wallerstein N, eds. *Community-Based Participatory Research for Health*. San Francisco: Jossey Bass, 2003.
- ³ U.S. Department of Health and Human Services. *Building Community Partnerships in Research: Recommendations and Strategies*. Washington, DC: U.S. Government Printing Office, April 1998.
- ⁴ Green LW, George MA, Daniel M, Frankish CJ, Herbert CJ, Bowie WR, et al. *Study of participatory research in health promotion*. Ottawa: The Royal Society of Canada, 1994.
- ⁵ Israel BA, Schulz AJ, Parker EA, and Becker AB. Review of community based research: Assessing partnership approaches to improve public health. *Annu Rev Public Health* 1998; 19: 173-202.
- ⁶ McTaggart R. Principles for participatory action research. *Adult Education Quarterly* 1991; 41: 168-87.
- ⁷ Cornwall A, Jewkes R. What is participatory research? *Soc Sci Med* 1995; 41: 1667-76.
- ⁸ Fielding JE, Sutherland CE, Halfon N. Community Health Report Cards: Results of a National Survey. *Am J Prev Med* 1999; 17: 79-86.
- ⁹ Fielding JE, Lamirault I, Nolan B, Bobrowsky J. Changing the paradigm: Planning for ambulatory care expansion in Los Angeles County using a community-based and evidence based model. *J Ambul Care Manage* 2000; 23: 19-27.
- ¹⁰ Cheadle A, Sullivan M, Krieger J, Ciske S, Shaw M, Schier JK, et al. Using a participatory approach to provide assistance to community-based organizations: The Seattle Partners Community Research Center. *Health Educ Behav* 2002; 29: 383-94.

Section 4. Data Collection and Analysis

Some studies have shown that sampling through residential telephone lines may not locate members of vulnerable populations, who most often have the worst health.¹ Therefore it was decided that in order to accurately reflect the health profile of these community areas and to capture populations at risk, this survey needed to be conducted face-to-face in the respondents' homes. The Survey Research Laboratory, an experienced survey organization housed at the University of Illinois at Chicago, was responsible for implementing the survey for us. That is, they randomly selected the survey households, trained the interviewers, and conducted the survey.

Sampling

In gathering the study sample, our main concern was to conduct interviews that would best represent each of the communities. That is, we wanted to assure, as well as we could, that we were not interviewing a special or selected group of people. We thus exercised great caution to create a representative sample for each community area. This is how we proceeded:

- First, 15 census blocks were sampled proportionate to size from each of the six targeted CAs.
- Second, from these blocks, 37 households were randomly selected. Each selected household received an advance letter informing them about the project and the interviewer's planned visit. Letters were signed jointly by a community SDC member, the co-principal investigator (CW), and the principal investigator (SW).
- Third, at each household visit, an initial screening was conducted to select an adult respondent age 18-75 at random from each household. This person may or may not have been the person who answered the door and may or may not have been a person who was home at the time of the initial household contact.
- Fourth, a child age 12 or younger was randomly selected from each household (about half the households contained children) and then the adult in the household with the most knowledge about that child was interviewed. This adult may or may not have been the adult who was interviewed about his or her own health.

On average, the adult interviews lasted about one hour and the child interviews lasted about 20 minutes. Respondents were given the option to conduct the interview in either English or Spanish.

With the plan of visiting each household for the interview already established, the community members on the SDC recognized a unique opportunity to distribute much-needed health information to each participating household. We felt that this would benefit the residents of the communities, and that it was our responsibility in carrying out community-based research. Educational materials and brochures on a variety of health topics were obtained from the Illinois and Chicago Departments of Public Health. Information was included on health topics such as diabetes and asthma management, cancer screening, cholesterol and high blood pressure, child immunizations, health insurance, and accessing local resources. These information packages were distributed to every surveyed household. Because it was impossible to address all health concerns, a note card was also included in each package describing how to request additional free materials from the Sinai Community Institute.

In addition to the information packages, respondents were given \$40 for their time and feedback on the Adult portion of the survey, and \$20 for the Child portion.

Quality Assurance

Following the development of the survey, the instruments were pre-tested in English and Spanish. Interviewers were solicited from the community areas through local newspapers. About 20 interviewers were trained and hired to administer the survey. More than half came from or resided in one of the six community areas. All 20 were culturally sensitive to the communities in which they interviewed. Every interviewer who worked in a community in which people spoke Spanish was fluent in Spanish. For most, Spanish was their first language. Ten percent of each interviewer's work was validated at random.

Finally, the proposal for this work was submitted to and approved by all relevant institutional review boards. Informed consent was obtained from every participant prior to the interview.

Introducing the Survey to the Community

In conveying information about the survey to respondents and others, the need for a project logo emerged. The Survey Design Committee (SDC) had already agreed that it would be best for the advance letters to be from the SDC members participating in the research process. The logistics of this however became difficult and inconsistent because households from each CA would receive stationery from different organizations. After many considerations, an image was agreed upon to capture the underlying aim of the project, 'Improving Community Health' (Figure 1). In keeping with the participatory approach of designing the survey, the artwork illustrates the many hands involved in building the survey and ultimately in achieving the goals of the project.

Response Rate

A total of 4,888 households were initially selected for study. By the time the interviewers returned to solicit participation in the survey, some households were vacant, some no longer existed (e.g., had burned down), and in some no one ever answered the door. Twelve attempts, on different days and at different times, were made to reach selected households. Over 85% of all interviewing was conducted during evening and weekend hours.

Figure 1. Survey Logo



Because this was a complex sampling design that took place in six diverse communities, we describe multiple aspects of the participation rates. About 10% of the originally selected 4,888 addresses did not represent households; in about 24% of the existing households no one could ever be located; when people could be located about 24% refused to answer any of the screening questions or to

otherwise speak with the interviewers. Notably, a total of 1,953 eligible persons were contacted for this survey, of which 1,699 agreed to participate and complete the survey. Thus, 87% of the people who were contacted fully participated. This might be termed the “participation rate.” The overall study response rate, calculated according to standard definitions,^{2,3} was 43.2%. This includes those households that no longer existed, those where we were unable to locate anyone, etc., in addition to those people who refused to participate. Table 1 presents the number of completed interviews for each community area.

Table 1. Number of Adult and Child Interviews

Community Area	Adult	Child*
Humboldt Park	300	160
West Town	303	82
South Lawndale	300	198
North Lawndale	304	172
Roseland	302	129
Norwood Park	190	70
Total	1699	811

*The primary caretaker of the child was interviewed about the child's health.

Source: Improving Community Health Survey

The response rates and their components varied substantially among the six community areas. For example, in North Lawndale, the poorest of these community areas, the “occupancy/residential” rate was 85%, while the refusal rate was 10%. In Norwood Park, the richest of these community areas, the “occupancy/residential” rate was 98% while the refusal rate was 35%. Thus, although many houses in North Lawndale were vacant (or burned down), when we located potential participants, 90% of them completed the survey. In Norwood Park virtually all of the houses were occupied but only 65% of them agreed to participate and completed the survey.

Data Analysis

Observations were weighted, according to established survey design theory, to account for the probability of selection (at the block, household and respondent levels) and to adjust or post-stratify to assure that the sample best represented each community area. Data were converted from the original CAPI database into both SAS⁴ and STATA⁵ data sets for analysis.

Whenever samples are drawn from larger populations,

as we have done in this study, one important question is how much random variability may be involved in the process. We all know that when we say something like “23% of all adults were smokers,” based upon a sample, that the real value for the larger population may not be exactly 23% but will quite likely be included in some interval, like 19% - 27%.

We associate such an interval with a certain degree of confidence that we have in our answer. Since statisticians usually select 95% as that level of confidence, these ranges of values are called “95% confidence intervals.” This defines the range of proportions that would be obtained if we repeated this process over and over again and gives us a good sense of how precisely we know the answer we are seeking. We can return to our smoking example to illustrate this point. Our best estimate was 23%. For one sample, the 95% confidence interval may be 19% - 27% and for another sample it may be 21% - 25%. Clearly, the second interval is better because it is narrower. How narrow (or wide) a confidence interval for a proportion is depends upon the number of people in both the numerator and the denominator. Confidence intervals for all proportions presented in this report are available and may be obtained by emailing us at shaam@sinai.org.

References

- ¹ Aneshensel CS, Frerichs RR, Clark VA, Yokopenic PA. Telephone versus In-Person Surveys of Community Health Status. *Am J Public Health* 1982;72:1017-1021.
- ² American Association for Public Opinion Research. *Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys*. Ann Arbor, Michigan: AAPOR, 2000.
- ³ Johnson T, Owens L. Survey response rate reporting in the professional literature. In Press.
- ⁴ SAS Institute, Inc. Window Based SAS and Window Based SAS/STAT. Cary, North Carolina, 2003.
- ⁵ Stata Corporation. Intercooled Stata 8.0. College Station, Texas, 2003.

Section 5. Ten Key Findings from the Survey

With 469 questions on the adult module and 144 questions on the child module it would be overwhelming to summarize all of our findings from the survey in this report. We have thus decided to proceed by presenting ten key findings. For each finding we present three sections:

- Background
- The Survey Data
- Policy Considerations

Topic I. Insurance and Access to Care

“Health care is an essential safeguard of human life and dignity and there is an obligation for society to ensure that every person be able to realize this right.” - Cardinal Joseph Bernardin, Chicago Archdiocese

Background

The U.S. remains the only industrialized country in the world that does not have a single payer health system or a national health care system. As a result, those who can afford health care get it, whereas those who cannot often do not. Among the latter are the 43,600,000 people (including 8,500,000 children) who are uninsured;¹ and the millions more who are under-insured or cycling on and off coverage.² In fact, the vast majority of the non-elderly uninsured (80%) come from working families, and are not comprised solely of the poor and unemployed as traditionally assumed.^{3,4} Furthermore, Census data describe racial/ethnic disparities in insurance coverage, which tells us who can and cannot afford health. Only 67% of Hispanic people and 81% of non-Hispanic Black people are insured compared to 90% of non-Hispanic White people.⁵

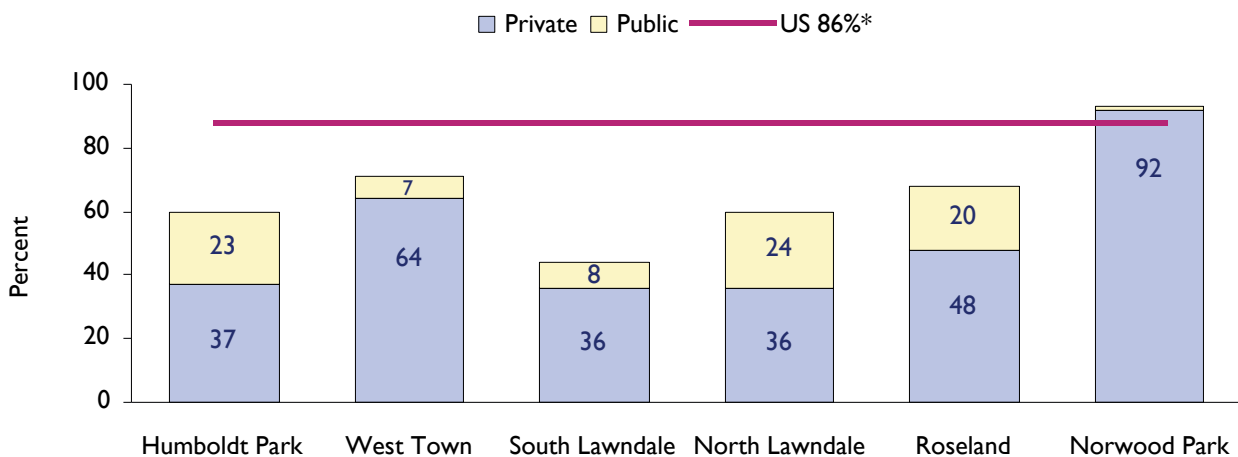
A common myth is that no American ever goes without health care. Yet, many people are without health insurance and thus often go without, or delay seeking essential preventive and continuing health care services

such as treatment for a child’s ear infection, routine immunizations, prescription medications, or timely breast cancer screening.^{6,7,8,9} In fact, the uninsured are likely to put off getting care, which results in inappropriate use of services such as increased use of the emergency department. So, when they finally do get treatment, it is often much more expensive and results in costs that are passed on to taxpayers and hospitals. Most importantly, the health of these people is compromised. Thus it is essentially true that anyone in the United States can obtain care when they have chest pain or are bleeding but, for the uninsured, it is often too little, too late.

The Survey Data

The adult survey contained 38 questions on insurance coverage, health seeking practices, and barriers to care. It also contained 16 questions on prescription medications and use of complementary and alternative medicine. The child survey contained 30 questions on insurance coverage and other health seeking practices for children age 12 and under.

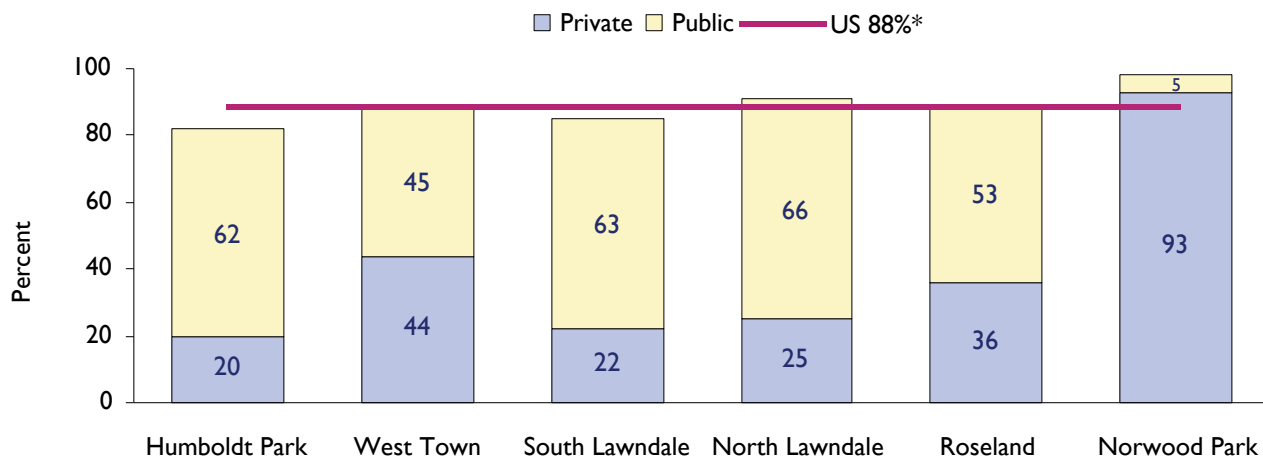
Figure I.1. Percent of Non-Elderly Adults (18-64 yrs) Covered by Public and Private Health Insurance



* Has any kind of health care coverage, Behavioral Risk Factor Surveillance System, 2002

Source: Improving Community Health Survey

Figure I.2. Percent of Children (0-12 yrs) Covered by Public and Private Health Insurance



* U.S. Census, 2000

Source: Improving Community Health Survey

Insurance Coverage

Figure I.1 presents the proportion of people age 18-64 who currently have any kind of health care coverage, categorized by private and public insurance types.[†] In all the community areas, the proportion of people with any health care coverage was substantially lower (with the exception of Norwood Park, where it was higher) than the national rate (86%),¹⁰ even when considered for race/ethnic-specific groups. The figure also shows that among those who are insured, only people living in Norwood Park and West Town are predominantly covered by private insurance. In the other communities, people are more generally uninsured or covered by public insurance. Note that in five of these six communities the proportions of uninsured are staggering: for example, 40% in Humboldt Park and North Lawndale and 56% in South Lawndale. Compare these proportions with 7% in Norwood Park. Thus, a resident of South Lawndale is nine times more likely to be uninsured than a person in Norwood Park.

Figure I.2 illustrates the proportion of insured children by private and public insurance types.[‡] The overall health care coverage for children age 0-12 is close to the national average (88%)¹¹ in most communities (except Norwood Park). The figure also shows that public insurance plays a far greater part in ensuring such coverage for children in these communities compared to private insurance.

A recent study found that instability in coverage leaves about 85,000,000, or 38% of the U.S. population, uninsured at some point over a four-year period.¹² In our survey, we asked whether currently insured adults and children were without coverage at some point in the last 12 months. Data describe that among those who are currently insured, up to 15% of the non-elderly (in West Town) and 8% of children (in Humboldt Park) were without health care coverage in the last year. The instability of insurance coverage is also an essential factor in mediating people's access to care.

Access to care

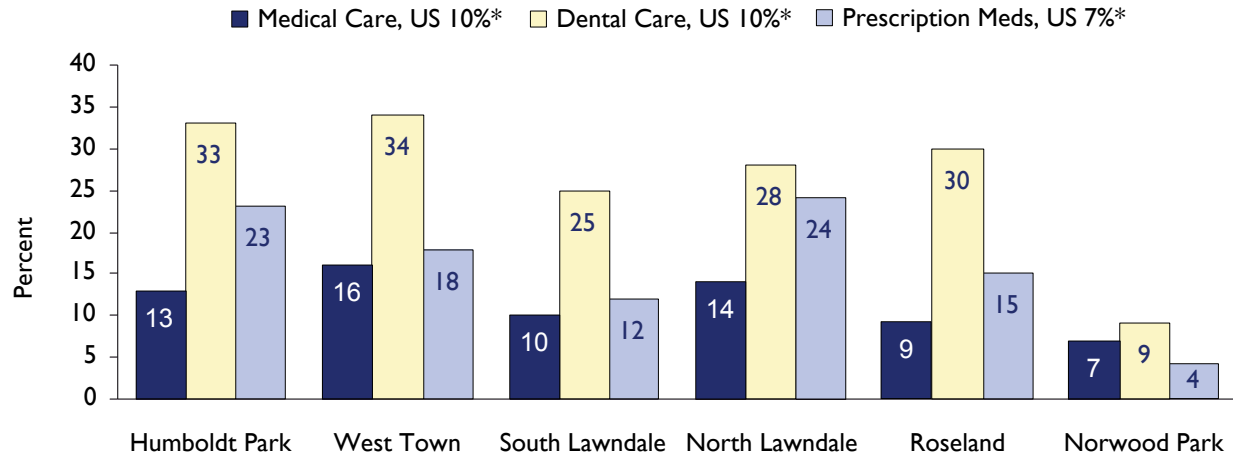
Although insurance levels are considerably lower for five of the surveyed communities (Figure I.1), ability to access "needed medical care or surgery in the past year" is just about equal to national figures (Figure I.3). This suggests, as is noted by the Institute of Medicine, that when one is in need of critical care, health services are available. It also suggests that hospitals like Mount Sinai Hospital, that serve the uninsured, deliver a great deal of care for free. Indeed, in fiscal year 2003 the Sinai Health System delivered \$49 million in non-reimbursed care.

Primary health care that offers screening, early detection of important health conditions, and the amelioration of morbidity and infirmity is not readily available to the

[†] Private insurance coverage includes all those currently insured and with either an HMO, PPO, or fee for service; Medigap Supplemental insurance or Military health insurance. Public insurance includes Medicare, Medicare Part B coverage or Medicaid coverage. Both private and public insurance categories exclude those whose insurance type is unknown (<4% of survey respondents). All respondents without private or public coverage are uninsured.

[‡] Private insurance is defined as those children insured by a caretaker's or parent's employer, by coverage purchased directly, or through a Military plan. Public insurance is defined as those children covered by Kidcare or SCHIP (federally supported coverage), Medicare, Medicaid or Medioplan.

Figure I.3. Percent of Adults Who Compromised Selected Health Care Services in the Last 12 Months Because They Could Not Afford Them



* National Health Interview Survey, 2001

Source: Improving Community Health Survey

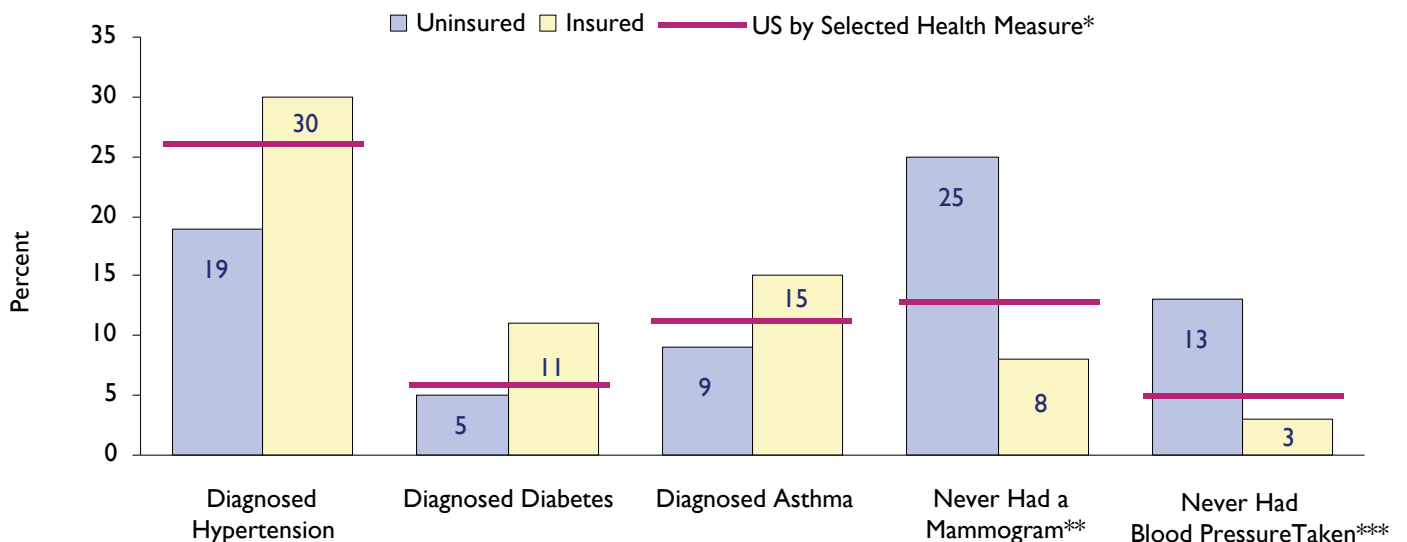
uninsured. For example, Figure I.3 also shows that very large proportions of people in these community areas (more than three times the national average in some) cannot get prescription medications when they need them (as high as 24% in North Lawndale), and that the same is true for needed dental care (as high as 34% in West Town). Note that these are actually underestimates of access to care. The 34% are people who believe that they *need* dental care but cannot get it. This does not include those who do not *perceive a need* but who have

not seen the dentist for a year or two or three. Data thus demonstrate that though we know that the lack of insurance compromises access to care, the consequences may be far worse in these communities than predicted by national figures.

Lack of Insurance Consequences

Survey data indicate that the uninsured are less likely to have a regular source of care or a primary care physician,

Figure I.4. Percent of Adults with Selected Health Measures by Insurance Status



* Behavioral Risk Factor Surveillance System, 2000

** Women 40 years and over

*** Comparison data for those who have not had their blood pressure checked in the last 2 years, Behavioral Risk Factor Surveillance System, 1999

Source: Improving Community Health Survey

Policy Considerations

Universal health insurance coverage is essential to the health and well being of all. As demonstrated by these data and many other studies, it is well documented that the uninsured are less likely to have a usual source of care,¹⁵ have limited access to preventive care,^{16,17} delay seeking treatment,¹⁸ and too often die sooner than those with insurance.¹⁹ Furthermore, communities with large numbers of uninsured people are also more likely to have hospitals close and doctors leave. Despite these problems, the number of Americans without insurance continues to grow.

Primary prevention must be one area of focus for the delivery of essential services (such as cancer screenings, immunizations, routine physicals, etc.). If market forces persist, private practitioners who sometimes provide free care to the uninsured will be unable to continue to offer such services or will go out of business. Improving access to care must be a priority. In this context we must support current providers. An additional approach would be for care to be made more available through free clinics and private offices so that fewer people delay seeking treatment and do not have to make unnecessary trips to emergency departments.

Programs must not only focus on health, but also on the known social and economic determinants of health. It is well known that poverty is a cause of poor health status. With this in mind, efforts must be made toward building stronger neighborhoods free of violence, ensuring fresh produce in local grocery stores, and providing jobs with living wages. Our leaders must make a commitment to *health for all* in order to alleviate the societal burden of disease and make a strong call for change.

One answer to the current health care crisis is offering universal health coverage for all Americans. In the past decades, incremental reforms have provided and continue to provide a safety net for some groups of people (i.e., Medicaid for the poor and Medicare for the elderly). While these programs provide essential services for many, they are always incomplete, at best, and current efforts to privatize, like the recently signed Medicare bill, threaten their availability to the most vulnerable.

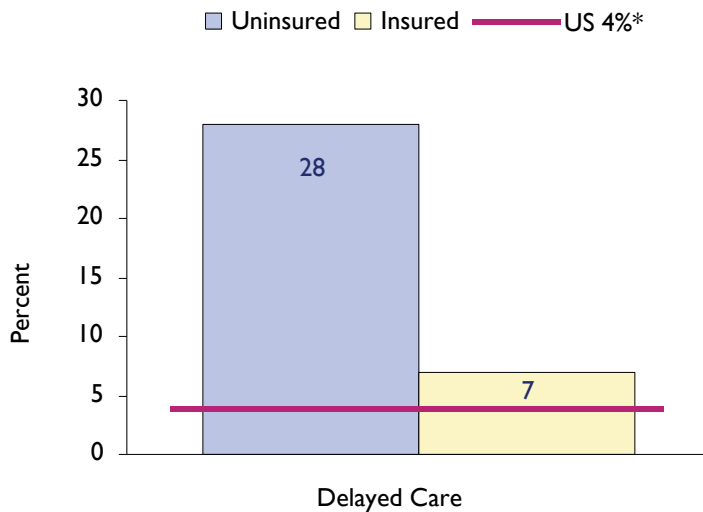
While supporting safety net efforts at the federal level is essential, policy and lawmakers at the state and city level can also advocate for local initiatives based on these same principles. A recent example of this is Governor Blagojevich's efforts to get prescription drugs from Canada at a lower cost. This could save public funds and possibly allow for the expansion of drug benefits. Data from the survey indicate that close to 25% of people in some Chicago community areas were unable to get needed prescription drugs during the past year because they could not afford them. It is thus critical that policymakers and community leaders show their support for such efforts on behalf of their constituents.

Other local incremental initiatives that policymakers can recommend and support would include the expansion of existing safety net programs such as the Family Care Program, which offers health care coverage to families with children enrolled in KidCare. For instance, raising the income level (which places a cap on those eligible) would expand coverage to many working class people who suffer from under-insurance and high medical premiums. Illinois policy makers can also support the expansion of the Circuit Breaker program, which would make more seniors eligible for assistance in paying for their prescription drugs.

Lastly, legislators have the opportunity to make a national statement by voting for the Bernardin Amendment, which calls for decent health care for everybody in Illinois. This amendment would ensure efficient allocation of funds so that 1.7 million uninsured residents of Illinois could claim their right to health care and their ability to access services.²⁰ To support this ideology and a proposed process to move towards quality health care for all, it maybe helpful to support the Campaign for Better Health Care, which is a coalition of individuals and organizations working to build a responsive health care system that provides accessible and affordable health care.²¹

which is consistent with the literature.^{13,14} As a result, they are also less likely to have had basic primary care such as screening for high blood pressure (“Ever had blood pressure taken by a health care provider?”) or breast cancer (“Ever received a mammogram, among women age 40 and over?”). Figure 1.4 illustrates how health conditions such as diagnosed asthma, diabetes, and hypertension are therefore much less likely to be diagnosed in uninsured people since they are less likely to have been screened for them. Obviously, if such conditions have not been detected and diagnosed, they cannot be treated. For example, note that 13% of the uninsured have never had their blood pressure taken compared with 3% of the insured.

Figure 1.5. Percent of Caretakers Who Delayed Seeking Care for Child



* National Health Interview Survey, 1998

Source: Improving Community Health Survey

Uninsured children similarly suffer in accessing care. For instance, we asked primary caretakers of randomly selected children, “In the past 12 months, have you ever delayed seeking medical care for the child?” Figure 1.5 reveals that caregivers of children without insurance in these communities are four times as likely to delay seeking medical care for them than are those with insurance. The consequences of the lack of insurance are the high cost of treating late-or never-diagnosed health conditions, which include poor health, financial burdens of care, and sometimes even premature death.

References

- 1 U.S. Census Bureau. Health Insurance Coverage 2002. Available at: <http://www.census.gov/hhes/hlthins/hlthin02/hlth02asc.html>.
- 2 Short PF, Graefe DR, Schoen C. Churn, Churn, Churn: How Instability of Health Insurance Shapes America’s Uninsured Problem. Issue Brief, November 2003. Available at: http://www.cmwf.org/programs/insurance/short_churn_ib_688.pdf.
- 3 Glied S, Lambrew JM, Little S. The Growing Share of Uninsured Workers Employed by Large Firms. Commonwealth Fund Report #672.
- 4 The Kaiser Commission on Medicaid and the Uninsured. Health Insurance Coverage in America, 2002 Data Update. December 2003. Available at: <http://www.kff.org/uninsured/loader.cfm?url=/commonspot/security/getfile.cfm&PageID=29340>.
- 5 U.S. Census Bureau. Health Insurance Coverage in the United States: 2002. Available at: <http://www.census.gov/prod/2003pubs/p60-223.pdf>.
- 6 American College of Physicians-American Society of Internal Medicine: No Health Insurance? It’s Enough to Make You Sick. Philadelphia, PA: American College of Physicians-American Society of Internal Medicine; 2000: White Paper.
- 7 Institute of Medicine. *Care Without Coverage: Too Little Too Late*. Washington, DC: National Academy Press, 2002.
- 8 Ayanian JZ, Kohler BA, Abe T, Epstein AM. The Relationship Between Health Insurance Coverage and Clinical Outcomes Among Women with Breast Cancer. *New England Journal of Medicine* 1993, 329(5): 326-331.
- 9 Bindman AB, Grumbach K, Osmond D, et al. Primary Care and Receipt of Preventative Services. *Journal of General Internal Medicine* 1996, 11(5): 269-276.
- 10 Behavioral Risk Factor Surveillance Survey, 2002.
- 11 U.S. Census Bureau. 2000.
- 12 Short PF et al., op. cit.
- 13 Ayanian JZ, Kohler BA, Abe T, Epstein AM. op. cit.
- 14 Bindman AB, Grumbach K, Osmond D, et al., op. cit.
- 15 Institute of Medicine. *Coverage Matters: Insurance and Health Care*. Washington, DC: National Academy Press, 2001.
- 16 Bindman AB et al. op. cit.
- 17 Ayanian JZ et al. op. cit.
- 18 Ayanian JZ et al. Unmet Health Needs of Uninsured Adults in the United States. *Journal of American Medical Association* 2000, 284(16): 2061-2069.
- 19 Institute of Medicine, *Care Without Coverage: Too Little to Late?* op. cit.
- 20 Bernardin Amendment website. <http://www.decenthealthcare.com/family.html>
- 21 <http://www.cbhconline.org/>

Topic 2. Diabetes

“The future for anyone with diabetes has never been brighter, provided he or she has access to the right treatments. But the consequences of inaction have never been more broadly devastating. This year more than 200,000 Americans with diabetes will die from its complications.” - Time Magazine Cover Story!

Background

Diabetes is a disease in which blood sugar (glucose) levels are too high. This happens because the body is not able to produce enough insulin. Diabetes can be associated with serious complications to the kidneys, nerves, blood vessels, and eyes. It can also lead to blindness, end-stage renal disease, heart disease, leg or foot amputations, and even premature death.^{2,3}

The growth of diabetes in the United States has been rapid. An estimated 18.2 million people in the United States have diabetes and 1.3 million cases were diagnosed last year compared with 878,000 in 1997. In 2000, diabetes was the nation’s 6th leading cause of death.⁴ It was also the 6th leading cause of death in Chicago, accounting for almost 800 deaths. Because diabetes is a disease whose incidence increases with age, there will likely be a continuing increase in diabetes mortality in the next decade as the U.S. population ages.⁵

Risk factors for diabetes include: family history, age, race/ethnicity, stress, depression, low socioeconomic status, obesity, poor diet, smoking, and inadequate physical

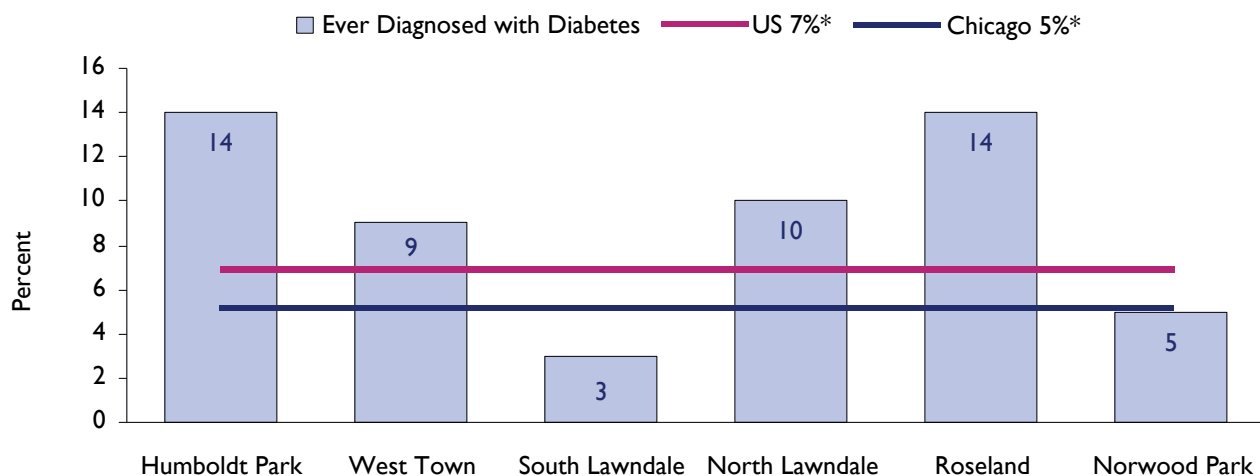
activity.⁶ Black and Hispanic people are at greater risk for diabetes morbidity and mortality than White people.^{7,8,9} In addition, research has found the prevalence of diabetes in Mexican-Americans to be more than twice that of non-Hispanic White Americans.

It is of vital importance that people at risk for diabetes get screened and take a proactive role in preventing or delaying the onset of the disease by changing their diet and exercising regularly. In addition, those with diabetes, together with their health care providers, should plan for regular clinic visits, frequently monitor their sugar and blood pressure levels, habitually check for signs of foot problems, and manage their diet and physical activity regimen in order to delay or avoid diabetes complications.¹⁰

The Survey Data

The adult module of the survey contained 26 questions on diabetes. To estimate the prevalence of diabetes in the communities, respondents were asked whether they had ever received a diagnosis of diabetes from a doctor or other health professional. This was done in a manner

Figure 2.1. Percent of Adults with Physician Diagnosed Diabetes



* Behavioral Risk Factor Surveillance System, 2002

Source: Improving Community Health Survey

consistent with many national health surveys. In addition, we asked about family history of diabetes and diabetes testing.

Note that 14% of the people in both Humboldt Park and Roseland reported having been diagnosed with diabetes, compared with only 7% in the United States and 5% in Chicago (Figure 2.1). However, the

essential observation pertaining to the prevalence of diabetes is that only 3% of the people in South Lawndale, almost all of whom are Mexican, reported ever having been diagnosed with diabetes. This is consistent with the fact that only 50% of the people in South Lawndale report ever having a blood test for diabetes, by far the lowest proportion among these communities. As a comparison, 67% in Humboldt Park report having had such a test (Table 2.1).

On the other hand, the proportion of people in South Lawndale reporting a family history of diabetes is

Table 2.1. Percent of Adults with a Family Member with Diagnosis of Diabetes, Those Who Have Never Had a Diabetes Blood Test, and Age-Adjusted Diabetes Mortality Rate (1999-2000)

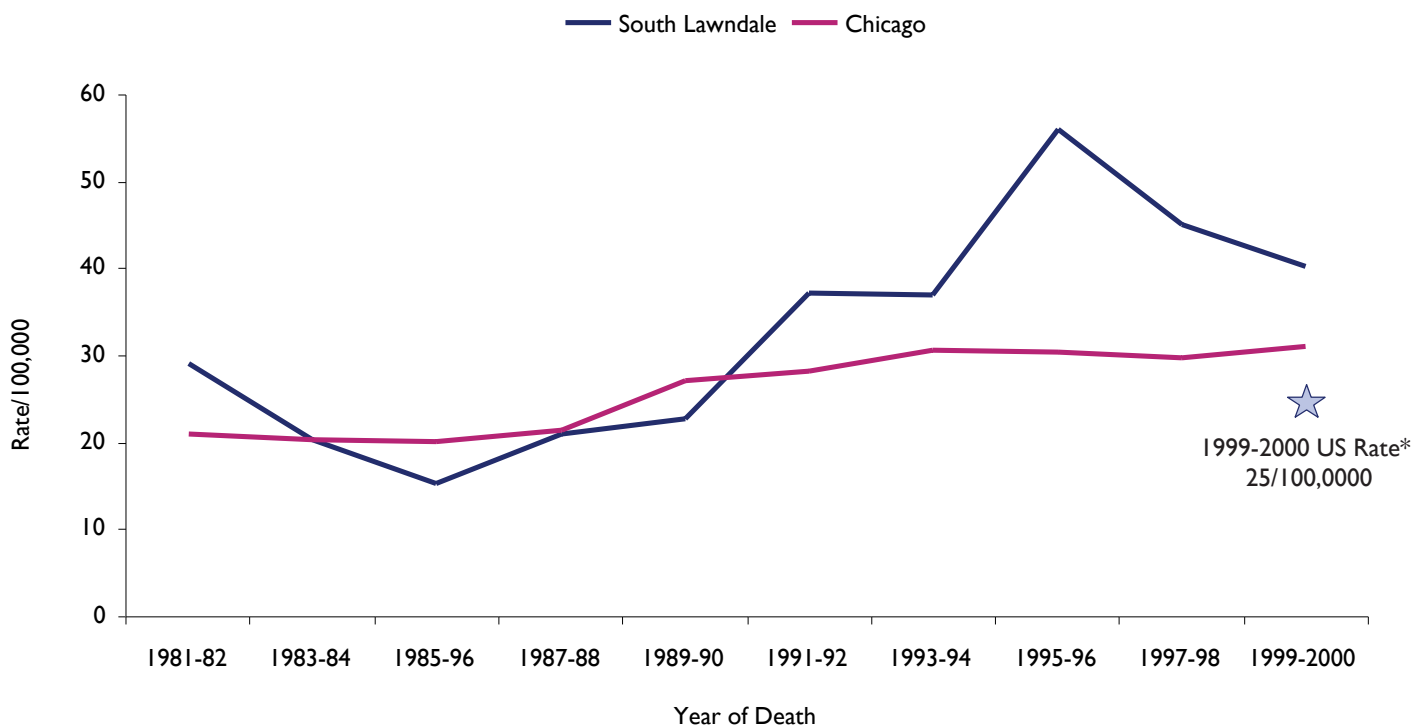
	Immediate Family Diagnosed w/Diabetes	Ever had a Diabetes Blood Test	Age-Adjusted Diabetes Mortality Rate*
Humboldt Park	38%	67%	51
West Town	31%	60%	26
South Lawndale	32%	50%	40
North Lawndale	38%	63%	37
Roseland	39%	64%	17
Norwood Park	19%	66%	17

* per 100,000 population

Source: Improving Community Health Survey and Illinois Department of Public Health Vital Records Tapes, 1999-2000

similar to that in the other community areas (other than Norwood Park). Most important, South Lawndale also has a relatively high diabetes mortality rate. In fact, this mortality rate (Figure 2.2), in recent years 40 (per 100,000 population), is higher than that for Chicago (31), the United States (25)¹¹ and all the other community areas with the exception of Humboldt Park (Table 2.1). In short, diabetes in South Lawndale is not being widely diagnosed and many people are dying from the disease. This phenomenon is likely due to the fact that many people in South Lawndale do not have health insurance (see Topic 1).

Figure 2.2. Age-Adjusted Diabetes Mortality Rate in South Lawndale & Chicago, 1981-2000



* National Center for Health Statistics, 2003

Source: Illinois Department of Public Health Vital Records Tapes, 1980-2000

Policy Considerations

First, we must increase awareness of diabetes as a very substantial public health problem that has both important health and economic impacts. As outlined above, undiagnosed or unmanaged diabetes can lead to serious sickness and even death. In addition, the direct (e.g., medical) and indirect (e.g., disability, work loss, premature mortality) costs of diabetes in 2002 totaled to \$132 billion.¹²

Second, those who are at risk for diabetes (such as people with a family history or those who are obese) should be counseled on the importance of eating right, being physically active, and managing their weight. It is important to remember that diabetes can be prevented or at least well-treated and managed after diagnosis.

To overcome the burden of undiagnosed and under-managed diabetes in South Lawndale, we call for an initiative targeted at this community area and others like it. We suggest that every adult in the community who has not yet been screened for diabetes be offered such a test, and then be offered appropriate follow-up and treatment. If this outreach fails to bring people in for testing, then we recommend door-to-door efforts. This type of work is best done in coalition with the people most affected (the residents of South Lawndale), in control of these efforts, and with community institutions (e.g., churches, businesses, schools) prominently involved.

References

- ¹ Gorman, C. Why So Many of Us Are Getting Diabetes. *Time*. December 8, 2003, p. 60
- ² Stratton IM, Adler AI, Neil HA, Matthews DR, Manley SE, Cull CA, Hadden D, Turner RC, Holman RR. Association of Glycaemia with Macrovascular and Microvascular Complications of Type 2 Diabetes: (UKPDS 35): Prospective Observational Study. *BMJ* 2000 Aug 12; 321: 405-12.
- ³ The Diabetes Control and Complications Trial Research Group. The Effect of Intensive Treatment of Diabetes on the Development and Progression of Long-Term Complications in Insulin-Dependent Diabetes Mellitus. *N Engl J Med* 1993; 329: 977-86.
- ⁴ Centers for Disease Control and Prevention. National Diabetes Fact Sheet: General Information and National Estimates on Diabetes in the United States, 2003. Atlanta, GA: U.S. Dept. of Health and Human Services, Centers for Disease Control and Prevention, 2003.
- ⁵ U.S. Dept. of Health and Human Services. *Healthy People 2010: Objectives for Improving Health*. Diabetes. January 2000, p. 5-4.
- ⁶ Black SA. Diabetes, Diversity, and Disparity: What do We do with the Evidence? *Am J Public Health*. 2003;93:955-962.
- ⁷ Lipton R, Good G, Mikhailov T, Freels, S, Donoghue E. Ethnic Differences in Mortality From Insulin-Dependent Diabetes Mellitus Among People Less Than 25 Years of Age. *Pediatrics* 1999; 103: 952 – 956.
- ⁸ Novello AC, Wise PH, Kleinman DV. Hispanic Health: Time for Data, Time for Action. *Journal of the American Medical Association* 1991; 265 (2): 253-255.
- ⁹ Singh GK, Siapush M. All-Cause and Cause-Specific Mortality of Immigrants and Native Born in the United States. *American Journal of Public Health* 2001; 91 (3):392-399.
- ¹⁰ Center for the Advancement of Health. *Health Behavior Change in Managed Care*. Washington DC; 2000.
- ¹¹ Anderson RN, Smith BL. *Deaths: Leading Causes for 2001*. National Vital Statistics Reports; vol 52 no 9. Hyattsville, Maryland: National Center for Health Statistics. 2003

Topic 3. Smoking

“Cigarette smoking causes more premature deaths than do all the following together: acquired immunodeficiency syndrome, cocaine, heroin, alcohol, fire, automobile accidents, homicide and suicide.”

- Kenneth E. Warner, Ph.D., Journal of the American Medical Association

Background

As is well known, the health related effects of cigarette smoking in the United States are far-reaching and costly. Mortality attributable to smoking is linked to more than 20 causes of death, including coronary heart disease, chronic obstructive pulmonary disease, pneumonia/influenza, lung and other cancers, stroke, emphysema, burns from cigarettes, and sudden infant death syndrome.^{1,2,3,4,5} An epidemiological software package, “Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC),” used to calculate the deaths caused by smoking, has estimated that nationally more than 430,000 deaths of smokers and 53,000 deaths of nonsmokers each year are a result of smoking and/or secondhand smoke exposure.^{6,7,8} A study from the Chicago Department of Public Health showed that 4,572 Chicago residents died of smoking-attributable causes in 1996.⁹

Additionally, it is estimated that heavy smokers (about a third of all smokers) lose 20 years of productive life due to early death from smoking sequellae.¹⁰ Another

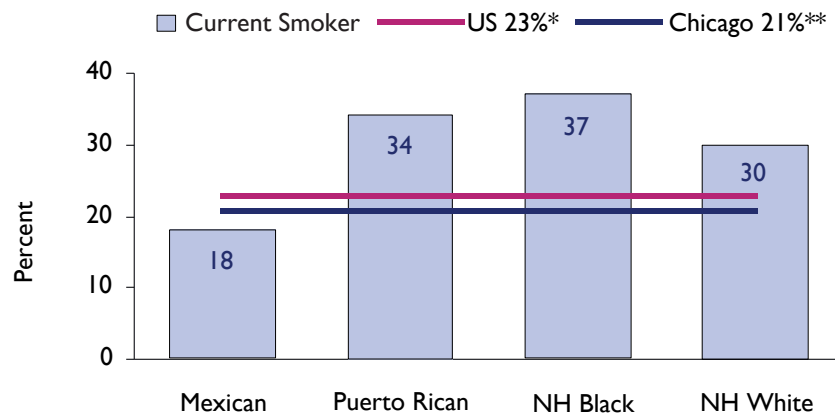
source estimates that U.S. smokers over age 65 lose 1.2 million years of potential life.¹¹ It has been reported by the Centers for Disease Control and Prevention (CDC) that each year more than 15 million children and youth in the U.S. are exposed to secondhand smoke.¹²

CDC estimates that direct medical care costs attributable to smoking or smoking-related disease top \$50 billion each year.^{13,14,15} Indirect costs to society in the form of lost earnings and lost productivity could add another \$50 billion to the financial burden.^{16,17} All of these smoking-related morbidities and mortalities are preventable.

In the mid 1960’s, when there is the first reliable data on current smoking prevalence, United States’ adult smoking rates were around 42%.¹⁸ From 1965 to 1990, smoking rates declined fairly steadily. Rates continued to decline through the 1990’s, although at a slower pace, declining to 23.3% in 2000 and 22.8% in 2001.¹⁹ While this steady decline is a positive trend, a 22.8% smoking prevalence rate still amounts to 47.7 million U.S. adult smokers in the year 2001.²⁰ Interestingly, this rate holds

true nationally for men and women, and for Black, White or Hispanic persons. Note that this 23% is almost double the Healthy People 2010 Goal of 12%.^{21,22} The overall Chicago adult smoking rate, at 21% in 2000, is slightly lower than the U.S. rate.

Figure 3.1. Current Smoking by Race/Ethnicity



* National Health Interview Survey, 2001

** Behavioral Risk Factor Surveillance System, 2000

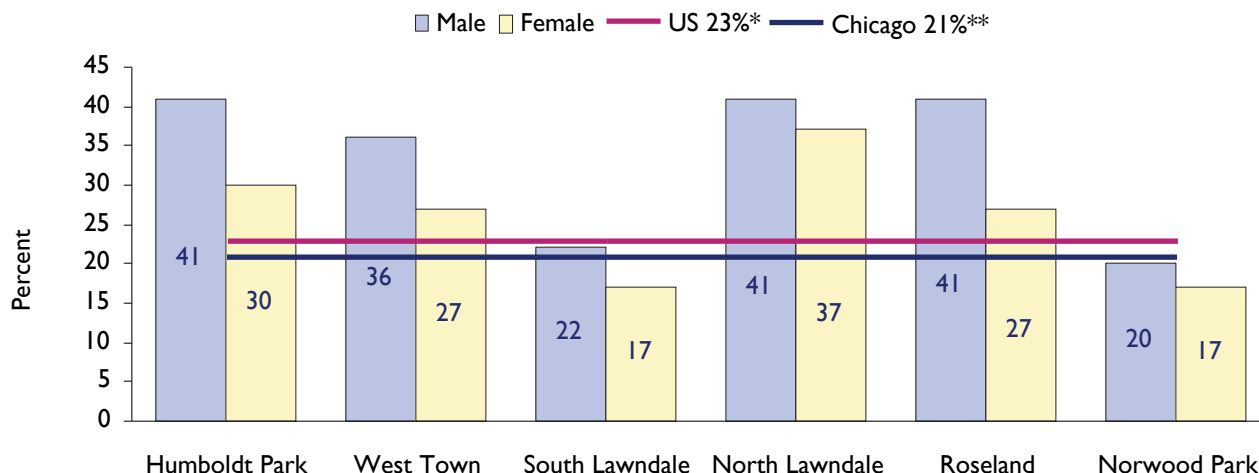
Source: Improving Community Health Survey

The Survey Data

The adult survey contained 25 questions about smoking. About 39% of the adults in North Lawndale, 35% in Humboldt Park, and 33% in Roseland are current smokers.[†] These are very large proportions, on the order of one-and-a-half to two times the national and Chicago proportions. There is a serious smoking problem in these community areas. These proportions may be

[†] A “current smoker” is someone who has smoked 100 or more cigarettes in his/her lifetime and at the time of the interview was smoking every day or some days.

Figure 3.2. Percent of Adults Who Are Current Smokers



* National Health Interview Survey, 2001
 ** Behavioral Risk Factor Surveillance System, 2000

Source: Improving Community Health Survey

compared with 18% in Norwood Park, 21% in Chicago and 23% in the U.S.

Smoking prevalence rates by race/ethnicity are presented in Figure 3.1. Note that Black residents (37%) and Puerto Rican residents (34%) smoke at higher rates than the corresponding rates for the United States or Chicago, on the order of at least 1.5 times higher. The 30% rate for White residents reflects an unusually high rate for Whites in West Town (41%) that is balanced out by the much lower rate in Norwood Park (19%). The rate for Mexican residents (18%) of these six community areas is interestingly lower than the Chicago Hispanic rate (22%), as a result of the much higher rate for Puerto Ricans (34%).

We have also analyzed this smoking data by gender (Figure 3.2). More men than women smoke in all of the six communities. The differences are most substantial in Humboldt Park, West Town, and Roseland. Not only is North Lawndale’s smoking rate the highest overall, but it also has the highest rate among women. Also note that women in North Lawndale smoke at a rate that is close to 10% higher than women in any other community.

Table 3.1 shows that in each community area approximately one-half of the current smokers have tried to quit smoking in the last year. Of those who tried to

Table 3.1. Percent of Current Smokers Who Tried to Quit in Last 12 Months and Those Who Are Still Trying to Quit

Community Area	Tried to Quit in Last Year	Still Trying to Quit at Interview
Humboldt Park	58%	68%
West Town	46%	49%
South Lawndale	58%	75%
North Lawndale	46%	70%
Roseland	51%	65%
Norwood Park	54%	57%

Source: Improving Community Health Survey

quit in the last 12 months, from 49-75% are still trying to stop smoking. These findings make it clear that we need to develop more comprehensive strategies to assist people who are trying to end their addiction to nicotine.

Policy Considerations

There are numerous policy decisions that could be made about the tobacco problem in the U.S., many of which have been discussed in great detail. We mention only two here. First, we must demand that more funding from the Tobacco Settlement go toward fighting smoking addictions. In November of 1998 the major tobacco companies agreed to pay for the damage they had done to the people of the United States by helping states to recover tobacco related health costs. This Master Settlement Agreement, as it is called, resulted in a proposed payout of \$9,118,539,559 (over \$9 billion) to Illinois through 2025. This comes to about \$333 million a year. That would make a nice dent in the battle against tobacco. Yet, virtually none of the settlement money is being spent on smoking prevention or even on health. For example, if one goes to the web site of the “Illinois Tobacco-Free Communities” program and clicks on “Funding Initiatives,” a full page comes up with the graphic of a man pulling money out of his wallet. Unfortunately, the words on this page say “There are no funding opportunities at this time.” According to *The Nation’s Health*,²³ the monthly publication of the American Public Health Association, “A large majority of states are still failing to use their share of the 1998 multi-state tobacco settlement to adequately fund tobacco prevention programs. Only 17 states have committed substantial funds for tobacco prevention and cessation programs.” Illinois is not one of those 17.

The “All for Health Coalition” was convened last fall by the American College of Physicians in an attempt to influence the Illinois State legislature to appropriate the tobacco settlement dollars to health related causes. The Coalition comprises over 80 health and public health organizations in Illinois, including the Illinois State Medical Society, the Council of Deans for the Illinois Medical Schools, the Illinois Public Health Association, Health and Medicine Policy Research Group, American Lung Association, and the Half for Tobacco Coalition, among others. We urge concerned people to work with the “All for Health Coalition” in pursuit of these very important goals.

If indeed Settlement funds are freed up for health in general or tobacco prevention in particular we recommend that these funds be targeted to those communities in greatest need. As our data show, not every community is hit equally hard by the effects of tobacco. Those that are hardest hit should have a greater opportunity for funding to combat this epidemic.

The second policy concern involves insurance coverage for smoking cessation counseling and related behavioral change. There isn’t any, and we should demand that these activities be covered. Right now any health professional who counsels a patient about smoking cessation or who uses any behavioral techniques to help that patient stop smoking does not get reimbursed for these efforts. We think these efforts should be covered by health insurance as it is well established that such counseling helps people stop smoking.²⁴ The data show that people have a serious desire to stop smoking and we need to support that desire.

References

- ¹ McGinnis JM, Foege WH. Actual causes of death in the United States. *JAMA* 1993;270:2207-12.
- ² Centers for Disease Control and Prevention (CDC). Special Focus: Reducing Tobacco Use. *Chronic Disease Notes and Reports* 2001;14(3):1-47.
- ³ Thun MJ, Day-Lally CA, Calle EE, et al. Excess mortality among cigarette smokers: Changes in a 20-year interval. *Am J Pub Health* 1995; 85 (9):1223-30.
- ⁴ MacKenzie TD. Smoking cessation: Cost-effective strategies. *Primary Care Case Reviews* 1998; 1(3): 129-38.
- ⁵ Bartecchi CE, MacKenzie TD, Schrier RW. The human costs of tobacco use. *New Engl J Med* 1994;330(13):907-912.
- ⁶ Begay ME, Traynor M, Glantz SA. The tobacco industry, state politics, and tobacco education in California. *Am J Pub Health* 1993; 83 (9):1211-21.
- ⁷ CDC. National Center for Chronic Disease Prevention and Health Promotion. *New guidelines challenge all clinicians to help smokers quit*. June 27, 2000. Available at: <http://www.cdc.gov/tobacco/quit/guidline.htm>.
- ⁸ CDC. Reducing tobacco use, op. cit.
- ⁹ Whitman S, Dell J, Simon M. *The Epidemiology of Cigarette Smoking in Chicago*. Chicago Department of Public Health, Epidemiology Program. Chicago, Illinois, December 1998, p. 29.
- ¹⁰ Warner KE. Profits of doom [Editorial]. *Am J Public Health* 1993; 83 (9): 1211-13.
- ¹¹ MacKenzie, op. cit.
- ¹² CDC. *Chronic Disease Notes and Reports* 2001; 14 (3):9.
- ¹³ CDC. New guidelines challenge all clinicians to help smokers quit, op. cit.
- ¹⁴ Rigotti NA. A 36-year-old woman who smokes cigarettes. *JAMA* 2000;284 (6):741-9.
- ¹⁵ Miller V, Ernst C, Collin F. Smoking-attributable medical care costs in the United States. *Soc Sci Med* 1999;48:375-391.
- ¹⁶ Elixhauser A. The costs of smoking and the cost effectiveness of smoking-cessation programs. *J Public Health Policy* 1990; Summer: 218-237.
- ¹⁷ Coalition on Smoking OR Health (American Cancer Society, American Lung Association, American Heart Association), October 31, 1995.
- ¹⁸ Rigotti, op. cit., p. 742.
- ¹⁹ CDC. Department of Health and Human Services. Cigarette smoking among adults – United States, 2001. *MMWR* 2003;52(40):953-956.
- ²⁰ Calculation: U.S. 2000 population 281,421,906 x 74.3% (age 18 and over) x 22.8% (smoking rate).
- ²¹ U.S. Department of Health and Human Services, *Healthy People 2010* (conference ed, in 2 vols). Washington, DC: US Dept of Health and Human Services, 2000.
- ²² Task Force on Community Preventive Services. Strategies for reducing exposure to environmental tobacco smoke, increasing tobacco-use cessation, and reducing initiation in communities and health-care systems. *MMWR* 2000; 49 (RR-12): 1-11.
- ²³ *The Nation's Health*, February 2001.
- ²⁴ Satcher D. Reducing Tobacco Use: A Report of the Surgeon General U.S. Dept. Health and Human Services, 2000. Available at: <http://www.cdc.gov/tobacco>.

Topic 4. Adult Asthma

“You may have heard that there is an asthma epidemic. But what you probably haven’t heard is this: Chicago is its ground zero.” - Chicago Tribune Magazine¹

Background

Asthma is a chronic disease that causes swelling and narrowing of the lung airways. The airways of people with asthma are sensitive and react to different agents in the environment called triggers. Some examples of triggers for asthma include cigarette smoke, allergens (e.g., pollen, pet hair), pollutants, infections such as colds, and strong emotions. When a person with asthma comes into contact with a trigger, he/she may experience an asthma attack. During asthma attacks the airways become swollen and the person has trouble breathing.

The prevalence of asthma has been increasing for the past 20 years. It is now estimated that about 14 million people in the United States have asthma, about 11 million experienced an asthma attack in the last year, and there are nearly 500,000 asthma hospitalizations and 5,000 asthma deaths per year.² Asthma also exerts a large financial toll on the family of the individual with asthma, the health care system, and society at large. In 1998, it was estimated that \$12.7 billion was spent nationally on the direct and indirect costs of asthma.³ Residents of urban areas and inner-cities in particular are hardest hit by

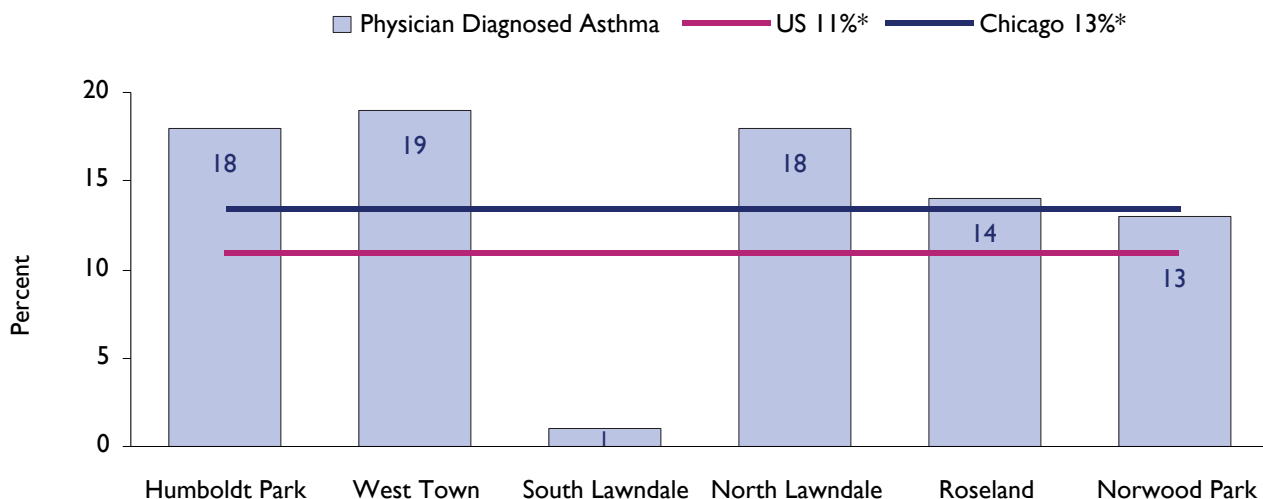
asthma. Studies have shown that New York and Chicago are two of the hardest hit cities in the country.^{4,5,6,7}

Asthma is a chronic disease, which means it cannot be cured; people with asthma will always have asthma. However, it is a disease that can be effectively managed through medications and trigger avoidance. This presumes that one has access to a doctor, can afford the proper medications, and has been taught how to properly use medications and avoid triggers.

The Survey Data

The adult survey contained 19 questions on asthma. To estimate the prevalence of asthma, respondents were asked whether they had ever received a diagnosis of asthma from a doctor or health care provider. Note that while nationally about 11% of people answer “yes” to this question, in three of the communities surveyed that number approached 20% (Figure 4.1). In other words, asthma is twice as common in some of these communities as it is nationally. These high numbers support the well-established notion that asthma is a very serious problem in large cities in general and in Chicago

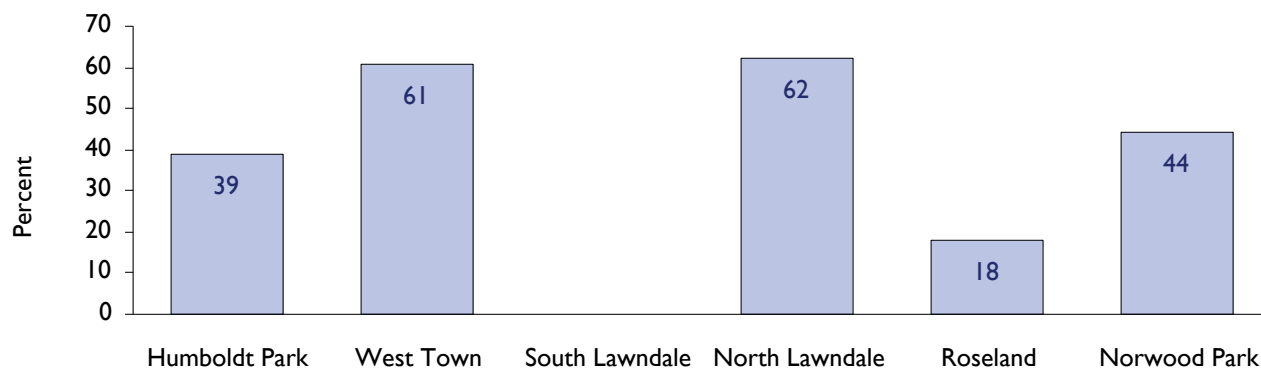
Figure 4.1. Percent of Adults with Physician Diagnosed Asthma



* Behavioral Risk Factor Surveillance System, 2000

Source: Improving Community Health Survey

Figure 4.2. Percent of Adults with Current Asthma* Who Have Received an Asthma Action Plan



*"Current Asthma" is defined by the person having been diagnosed by a health care provider and having had an asthma attack within the past 12 months

Source: Improving Community Health Survey

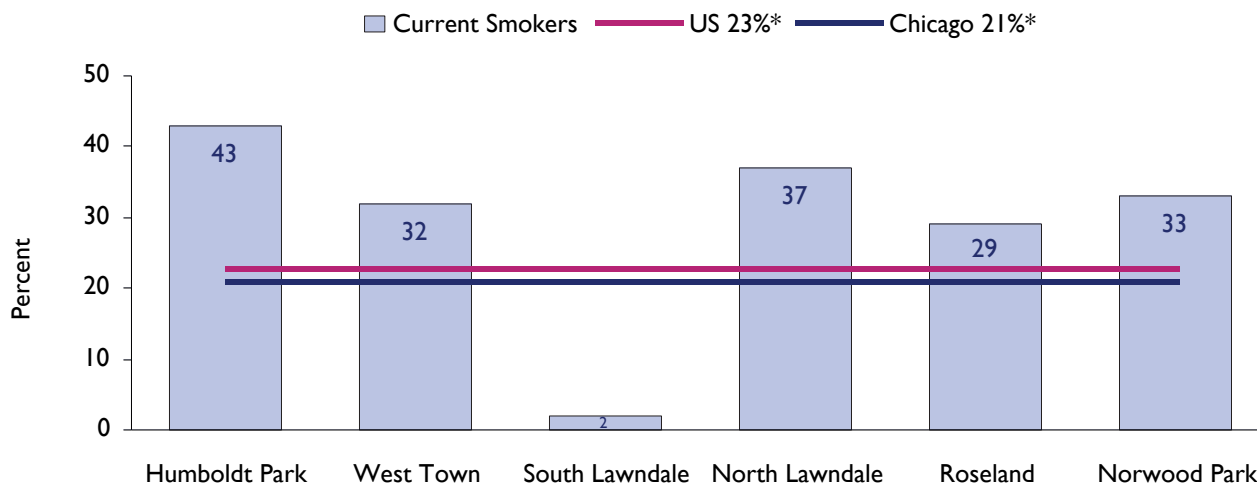
in particular.^{8,9} The very low prevalence of diagnosed asthma in South Lawndale (1%) leads us to once again posit that this results from a lack of insurance leading to lack of access to health care.

used as the criterion.^{10,11} In four of the six communities, over 25% of those with asthma had poorly controlled asthma, while that number approached or exceeded 50% in Humboldt Park and North Lawndale.

It has long been hypothesized that high asthma morbidity and mortality rates in urban areas may be related to both a higher prevalence of asthma and a decreased likelihood of taking the measures necessary to properly control asthma. We have already demonstrated that the prevalence of asthma is higher in several of the urban communities surveyed. To test the second hypothesis, we asked a series of questions to determine whether those with a diagnosis of asthma had their asthma under proper control. The National Asthma Education and Prevention Program's standards for properly controlled asthma were

Another observation that caught our attention may help to explain the lack of proper asthma control in some of these communities. We asked people whose asthma was currently active (i.e., they reported having had an asthma attack within the past year) if they had ever received a written action plan for their asthma. Such a plan explains what to do in different circumstances when one's asthma acts up and is crucial to the proper management of the disease. It is one component of the 10 "key clinical activities" prescribed by the National Asthma Education and Prevention Program for providing quality asthma

Figure 4.3. Percent of Adults with Physician Diagnosed Asthma Who Currently Smoke



* Comparison data is NOT limited to those with asthma, but reflects smoking prevalence in the general population, Behavioral Risk Factor Surveillance System, 2000

Source: Improving Community Health Survey

Policy Considerations

As the factors responsible for the development of asthma have not yet been clearly delineated, current efforts need to be aimed at properly managing the disease among those who have it. While asthma cannot be cured, it can be controlled and no one should be dying of it. There is a need for intensified education efforts around asthma aimed at both physicians and patients. We recommend a citywide campaign to educate physicians on the importance of developing written asthma action plans for their patients with asthma. Given that some members of vulnerable communities may have lower literacy levels and that these same communities are often the ones most burdened by asthma, it is also imperative that physicians provide verbal reinforcement of the information contained within the written plan. Lastly, appropriate educational materials should be available and can be sent home with patients.

Patient health education, conducted by trained health educators, should also be a key component of asthma clinical care. Health educators can work with patients to assure that they know how to properly take their medications, understand their written action plan, and are able to overcome barriers in medication use and trigger avoidance. Such case management and health education for people with asthma should be fully reimbursable.

Finally, efforts should be concentrated on helping those with asthma quit smoking. Universal health care that would make regular asthma care and medications affordable for all who need them would also help in minimizing the impact of asthma.

care.¹² We would therefore desire that 100% of the people with active asthma have such a plan. Yet, as Figure 4.2 shows, the proportions with such a plan are quite low. North Lawndale (62%) and West Town (61%) show the highest proportions, yet even these are very far from 100%.

Finally, we were struck by the high smoking rates in some of the communities in general (see Topic 3), and among people with asthma in particular. As cigarette smoke is a common trigger for asthma attacks, it is advised that

people with asthma avoid being around cigarette smoke whenever possible. In five of the six communities the rate of smoking in people with asthma is higher than the national rate (23%) (Figure 4.3). Furthermore, in four of the six communities we studied, people with asthma smoke at a higher rate than people without asthma! This is certainly a major concern. In addition to direct exposure to smoke among those who are smokers, the high smoking rates in some of these communities increase the likelihood that those with asthma who do not choose to smoke are also being exposed to secondhand smoke.

References

- ¹ Galatzer-Levy J. "Asthma's Ground Zero," *Chicago Tribune Magazine*, April 27, 2003.
- ² Mannino DM, Homa DM, Akinbami LJ, et al. Surveillance for Asthma – United States, 1980-1999. In: *CDC Surveillance Summaries. MMWR* 2002; 51 (No. SS-1): 1-13.
- ³ Weiss KB, Sullivan SD. The Health Economics of Asthma and Rhinitis: Assessing the Economic Impact. *J Allergy Clin Immunol* 2001; 107:3-8.
- ⁴ Weiss KB, Wagener DK. Changing patterns of asthma mortality: identifying target populations at risk. *JAMA* 1990; 264: 1683-1687.
- ⁵ Thomas SD, Whitman S. Asthma Hospitalizations and Mortality in Chicago: An Epidemiological Overview. *Chest* 1999; 116(4S): 135S-140S.
- ⁶ Targonski PV, Persky VW, Orris P, et al. Trends in Asthma Mortality Among African Americans and Whites in Chicago. *Am J Public Health* 1994; 84: 1830-1833.
- ⁷ Marder D, Targonski P, Orris P, et al. Effect of Racial and Socioeconomic Factors on Asthma Mortality in Chicago. *Chest* 1992; 101(suppl.): 426S-429S.
- ⁸ Weiss, Wagener, op.cit.
- ⁹ Thomas, Whitman, op.cit.
- ¹⁰ National Heart, Lung, and Blood Institute, National Asthma Education and Prevention Program. Expert Panel Report 2: Guidelines for the Diagnosis and Management of Asthma. Bethesda, MD: U.S. Dept. of Health and Human Services, National Institutes of Health, 1997; publication no. 97-4051.
- ¹¹ Centers for Disease Control and Prevention. Key Clinical Activities for Quality Asthma Care: Recommendations of the National Asthma Education and Prevention Program. *MMWR* 2003; 52 (No. RR-6): 1-8.
- ¹² Ibid.

Topic 5. Pediatric Asthma

“I think that asthma’s worse for children, though, because play is a part of childhood and children cannot play with real abandon when they feel so bad. Even mild asthma weighs their spirits down and makes it hard to smile easily, or to read a book with eagerness, or to jump into a conversation with entire spontaneity.”

- Jonathan Kozol, Ordinary Resurrections¹

Background

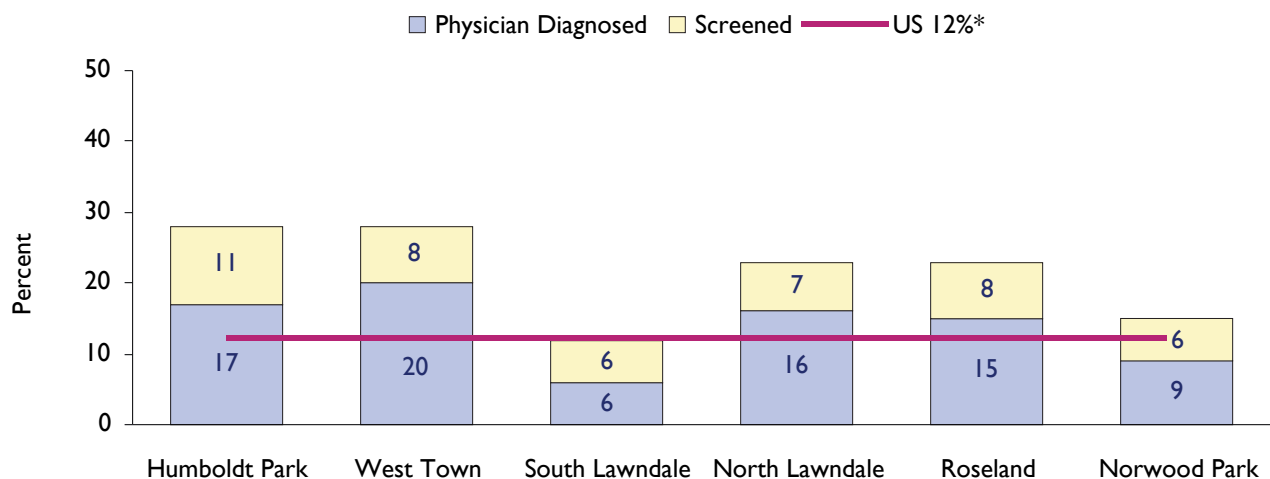
Asthma is the most common chronic condition of childhood in the United States, affecting about 5 million children.² Disadvantaged Black and Hispanic children have been found to have a higher prevalence of asthma, along with higher morbidity and mortality, when compared to White children.^{3,4,5,6} It has been suggested that such disparities may be indicative of personal, social, and environmental determinants, including urban living and improper self-management. Inner-city, and more specifically Medicaid-insured children, are likely to have poorly controlled asthma.^{7,8} A portion of the problem is likely due to the fact that these children are frequently improperly medicated. In a sample of previously hospitalized inner-city children age 2-12 with asthma, 83% met symptom criteria for persistent asthma, meaning they should be on daily asthma medications (specifically anti-inflammatory agents), yet only 35% were on such a regimen.⁹ This tendency toward improper medical management is likely related to the fact that this high-risk

group has been found to rely predominantly on episodic and emergency care rather than routine preventive care for managing their asthma.^{10,11,12,13,14} The majority of inner-city children are forced to use the emergency room (ER) as their first source of medical help when experiencing asthma problems and many must use the ER as their usual source of asthma care.¹⁵ As a result of its improper management, pediatric asthma exerts a large financial toll on the family of the child with asthma, the health care system, and society at large. In 1990, it was estimated that \$1.8 billion was spent nationally on the direct and indirect costs of pediatric asthma.¹⁶

The Survey Data

The child module of the survey contained 22 questions on pediatric asthma. We pursued the question of the prevalence of asthma (how many children have asthma) in two ways. First, we asked whether the child had ever received a diagnosis of asthma. Then, in order to estimate the number of children who may have asthma but had

Figure 5.1. Percent of Children (0-12 yrs) with Physician Diagnosed and Screened Asthma



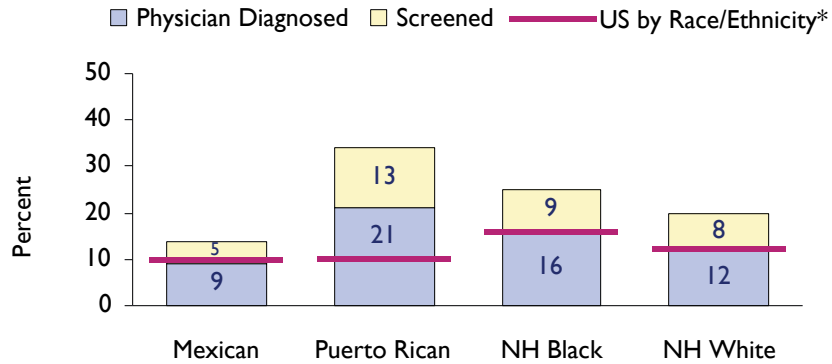
* Comparison data is the prevalence of physician diagnosed asthma, National Health Interview Survey, 1998

Source: Improving Community Health Survey

not been diagnosed, we also asked a series of four questions that have often been used to screen for pediatric asthma.¹⁷ If the questions are answered in a certain combination, this suggests that the child is likely to have asthma. Figure 5.1 presents the proportion of children with diagnosed asthma, screened asthma, and the combined total in each community. The prevalence of diagnosed asthma could be seen as the low end of a range, while the total of those with a diagnosis and those with screened asthma could be seen as the high end of the range (this total will be referred to as *potential* asthma from this point forward), with the true prevalence lying somewhere in between. Note that the prevalence of potential asthma reaches 28% in Humboldt Park and West Town, and 23% in North Lawndale and Roseland. When the data are presented by race and ethnicity (Figure 5.2), the highest rates are among the Puerto Rican (34%) and non-Hispanic Black (25%) children.

The proportion of children who potentially have asthma in several of the community areas is exceptionally high. These numbers are consistent with the preliminary findings of a study in Harlem that was recently highlighted on the front page of the *New York Times* (April 19, 2003).

Figure 5.2. Percent of Children (0-12 yrs) with Physician Diagnosed and Screened Asthma by Race/Ethnicity



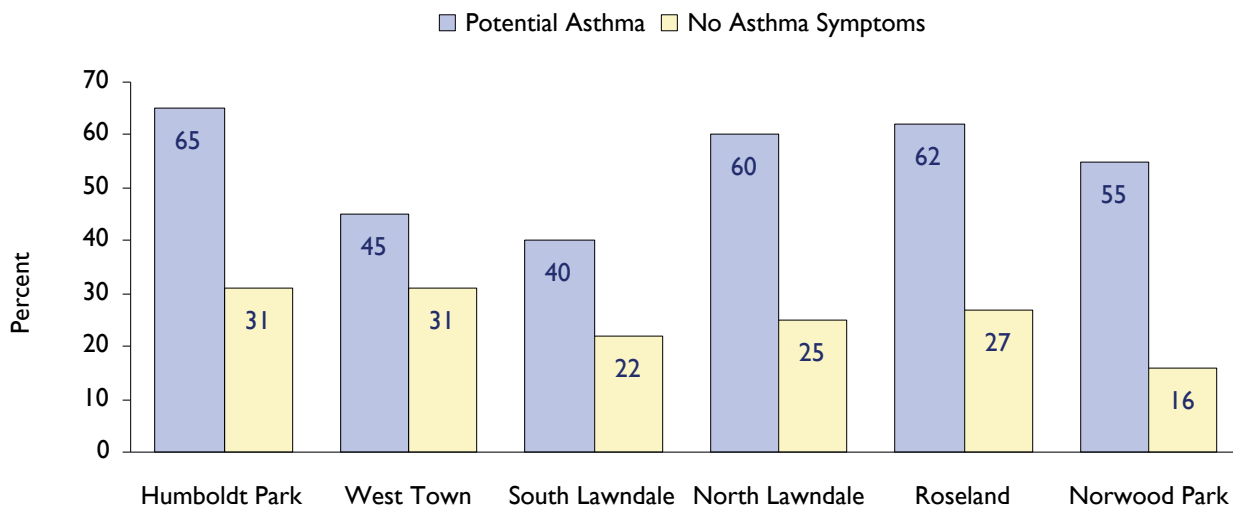
* Comparison data is the prevalence of physician diagnosed asthma, National Health Interview Survey, 1998

Source: Improving Community Health Survey

The article revealed that, “One of every four children in central Harlem has asthma, which is double the rate researchers expected to find and, researchers say, is one of the highest rates ever documented for an American neighborhood.” Note that for several of the neighborhoods we surveyed, and especially for Black and Puerto Rican children, the rates are as high or even higher than 25%. Thus, what is front-page news in the *New York Times* is an every day reality for the children in these Chicago communities.

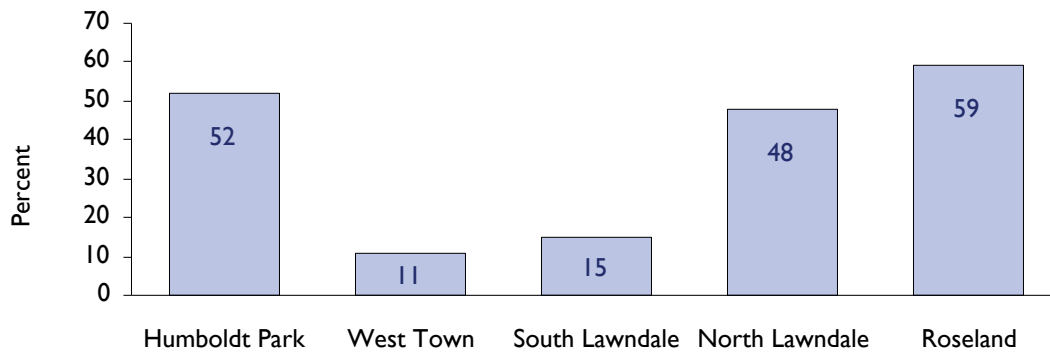
Several other observations from the survey are intimately related to the burden that pediatric asthma

Figure 5.3. Percent of Children (0-12 yrs) with At Least One Emergency Department Visit in the Last 12 Months



Source: Improving Community Health Survey

Figure 5.4. Percent of Children (0-12 yrs) with Physician Diagnosed Asthma Who Live with a Smoker



Source: Improving Community Health Survey

exerts on certain communities. For example, we asked a series of questions to determine whether children with a diagnosis of asthma had their asthma under proper control. The National Asthma Education and Prevention Program's standards for properly controlled asthma were used as the criteria.^{18,19} Norwood Park was not evaluated further as only five children had a diagnosis of asthma. In all of the remaining five communities, over 25% of children with asthma did not have the condition under proper control. In Humboldt Park, 54% of children with asthma did not have their asthma under control.

We also asked how often children had been to the emergency room (ER) in the past year. Figure 5.3 shows the proportion of children who went to the emergency room at least once in the past year, dividing the children into those with potential asthma and those without any symptoms of asthma. Note that well over 50% of children with potential asthma indicated having used

the ER in the past year (65% in Humboldt Park, 62% in Roseland, 60% in North Lawndale) compared to about half as many of the children without asthma. Our data thus support findings by other researchers suggesting that children with asthma from poor, inner-city, and minority communities over utilize the emergency health care system.^{20,21,22,23,24,25}

Finally, we were interested in the level of exposure to secondhand cigarette smoke experienced by children with an asthma diagnosis. Figure 5.4 shows the proportion of children with diagnosed asthma living with a smoker. Note that in three of the community areas, the number approached or exceeded 50%. Regularly exposing a child with asthma to cigarette smoke has dire health consequences. Given the high smoking rates in several of these communities (see Topic 3), children are likely to be exposed to secondhand smoke.

Policy Considerations

Pediatric asthma exerts a terrible toll on children with the condition, their families, and society as a whole. Asthma attacks have been found to have a lasting effect on the health of children as they grow, effects that continue into adulthood. Chicago is one of the cities most heavily impacted by pediatric asthma, and it is incumbent upon us to help improve the situation.

We do not know why children initially acquire asthma but we do know how we can keep them from getting seriously ill. As with adult asthma (see Topic 4), there is a need for intensified education efforts about pediatric asthma. The results of a recent research study conducted by the Pediatrics Department at Mount Sinai Hospital justify this suggestion. The purpose of the study was to evaluate the effects of health education and case management on asthma in children age 16 years and under. Study participants were randomized into three groups:

- Group One (G1) participants were given brief, basic asthma education by a trained asthma educator;
- Group Two (G2) participants were also provided with asthma education by the trained asthma educator, however the education was reinforced on a monthly basis;
- Group Three (G3) participants were provided with reinforced asthma education as in G2, with the addition of case management.

The study utilized community members as health educators. All three groups had medication and equipment use tailored to the participants' individual needs, were taught how to properly use their medication, had a personal action plan developed for them, and were instructed on its use. The results of the study showed a decrease in the use of emergency medical services over the study period in all three study groups (and the group with the most intensive intervention improved to the greatest degree), suggesting that even a one-time health education session helped children and their families better control their asthma. The intervention was also found to result in substantial cost-savings.

It therefore seems that resources allocated toward developing and implementing education programs delivered by health educators from the community would be well spent. Ideally, health educators would be present both in primary care settings and, given that so many inner-city children utilize the ER as their usual source of care, in the ER as well. Health educators in the ER would need to particularly focus their attention on getting children connected with effective primary care and on helping parents to overcome the barriers that currently keep them from taking their children to the doctor on a routine basis.

It is also imperative that primary care physicians be trained on the National Asthma Education and Prevention Programs guidelines for asthma care, including medications and the need for a personal action plan.

Finally, efforts need to be concentrated toward limiting the exposure of children with asthma to secondhand cigarette smoke. These efforts need to include smoking cessation efforts targeted to the caregivers of children with asthma, along with laws prohibiting smoking in all public places (e.g. restaurants).

References

- ¹ Kozol J. *Ordinary Resurrections: Children in the Years of Hope*. New York: Harper Collins, 2001.
- ² Adams PF, Marano MA. Current Estimates From the National Health Interview Survey, 1994. *Vital Health Stat* 1995;10:94.
- ³ Lozano P, Connell FA, Koepsell TD. Use of Health Services by African-American Children with Asthma on Medicaid. *JAMA* 1995;274:469-73.
- ⁴ Weiss KB, Wagener DK. Changing Patterns of Asthma Mortality: Identifying Target Populations at High Risk. *JAMA* 1990;264:1683-87.
- ⁵ Halfon N, Newacheck PW. Childhood Asthma and Poverty: Differential Impacts and Utilization of Health Services. *Pediatrics* 1993;91:56-61.
- ⁶ Finkelstein JA, Brown RW, Schneider LC, et al. Quality of Care for Preschool Children with Asthma: The Role of Social Factors and Practice Setting. *Pediatrics* 1995;95:389-94.
- ⁷ Finkelstein JA, Lozano P, Farber HJ, et al. Under Use of Controller Medications Among Medicaid-insured Children with Asthma. *Archives of Pediatric Adolescent Medicine* 2000;156:562-567.
- ⁸ Warman KL, Silver EJ, Stein RE. Asthma Symptoms, Morbidity, and Anti-Inflammatory Use in Inner-City Children. *Pediatrics* 2001;108:277-282.
- ⁹ Ibid.
- ¹⁰ Halfon, Newacheck, op.cit.
- ¹¹ Finkelstein, Brown, Schneider, et al. op.cit.
- ¹² Halfon N, Newacheck PW, Wood DL, St. Peter RF. Routine Emergency Department Use for Sick Care by Children in the United States. *Pediatrics* 1996;98:28-34.
- ¹³ Weiss KB, Gergen PJ, Wagener DK. Breathing Better or Wheezing Worse? The Changing Epidemiology of Asthma Morbidity and Mortality. *Annu Rev Public Health* 1993;14:491-513.
- ¹⁴ Rand CS, Butz AM, Kolodner K, et al. Emergency Department Visits by Urban African American Children with Asthma. *J Allergy Clin Immunol* 2000;105:83-90.
- ¹⁵ Singh AK, Woodruff PG, Ritz RH, Mitchell D, Camargo Jr CA. Inhaled Corticosteroids for Asthma: Are ED Visits a Missed Opportunity for Prevention? *Am J Emerg Med* 1999;17:144-48.
- ¹⁶ Weiss KB, Gergen PJ, Hodgson TA. An Economic Evaluation of Asthma in the United States. *N Engl J Med* 1992;326:862-6.
- ¹⁷ Wolf RL, Berry CA, O'Connor T, Coover L. Validation of the Brief Pediatric Asthma Screen. *Chest* 1999;116:224S-228S.
- ¹⁸ National Heart, Lung, and Blood Institute, National Asthma Education and Prevention Program. Expert Panel Report 2: Guidelines for the Diagnosis and Management of Asthma. Bethesda, MD: US Dept. of Health and Human Services, National Institutes of Health, 1997; publication no. 97-4051.
- ¹⁹ Centers for Disease Control and Prevention. Key Clinical Activities for Quality Asthma Care: Recommendations of the National Asthma Education and Prevention Program. *MMWR* 2003; 52 (No. RR-6): 1-8.
- ²⁰ Halfon, Newacheck. op.cit.
- ²¹ Finkelstein, Brown, Schneider, et al. op. cit.
- ²² Halfon, Newacheck, Wood, St. Peter. op. cit.
- ²³ Weiss KB, Gergen PJ, Wagener DK. op. cit.
- ²⁴ Rand, Butz, Kolodner, et al. op. cit.
- ²⁵ Singh, Woodruff, Ritz, Mitchell, Camargo Jr. op. cit.

Topic 6. Depression

“Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with adversity. Mental health is indispensable to personal well-being, family and interpersonal relationships, and contribution to community or society.”
– Surgeon General’s Report on Mental Health¹

Background

Depression is the most common of all mental illnesses, affecting nearly 10% of the adult population (18.8 million adults) in the United States each year. Depression has profound effects on individuals, families, and societies. It is the cause of two-thirds of suicides each year and is associated with alcohol and illicit drug abuse. It is also the leading cause of disability in the nation.² In fact, the annual costs of depression in the U.S. are extremely high, comparable to those of heart disease.³

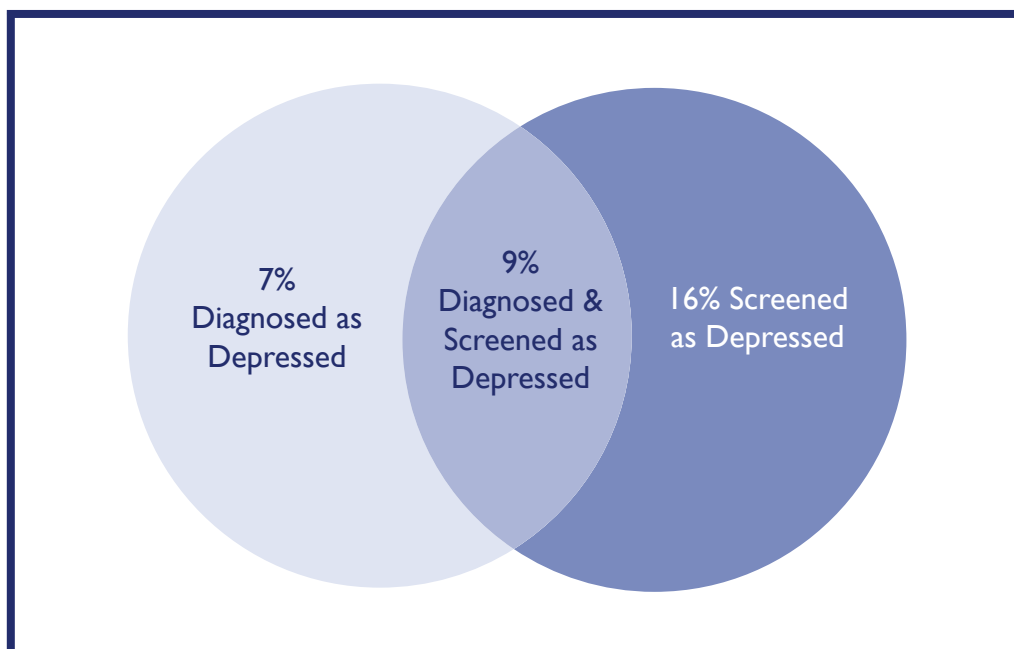
While effective treatments are available, a majority of sufferers remain undiagnosed and under-treated. As with many physical illnesses, the burden of depression is greater for those persons who are poor, less educated, and unemployed. It is also more common among those who are female, young, unmarried, from certain racial/ethnic groups, or who have a serious physical

illness.⁴ These persons are also the least likely to obtain appropriate care for their depression. Income and lack of health insurance are two well-documented factors accounting for differences in depression treatment patterns. Misunderstanding of mental illness and the associated stigmatization also prevent many people from seeking professional help when they need it.

The Survey Data

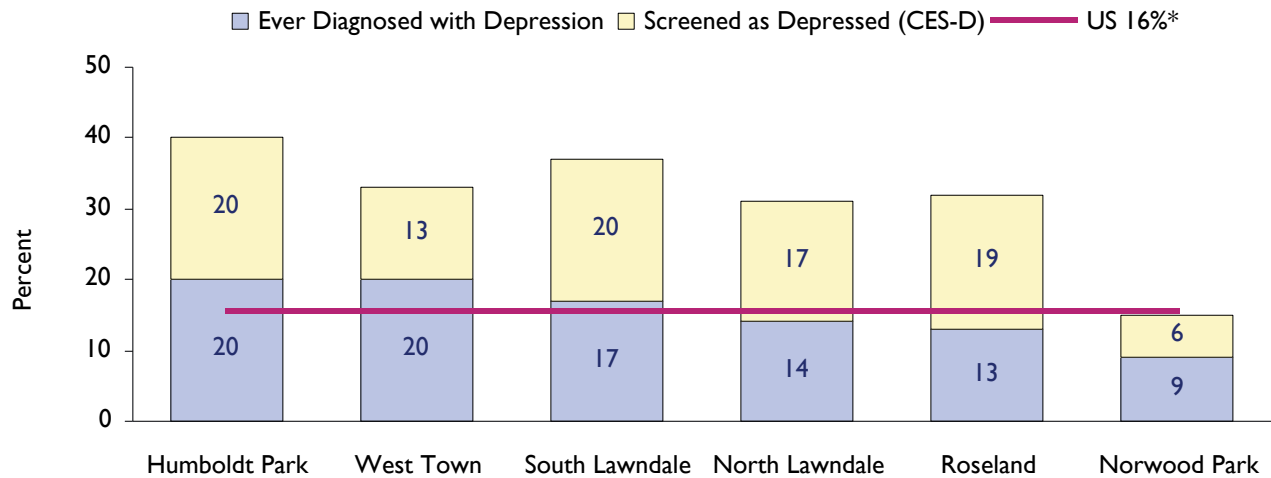
The adult survey contained 12 questions on depression and 17 more questions on access to mental health services. We pursued the matter of who was depressed in two different ways. First, we used the common survey question: “Have you ever been diagnosed as being depressed?” Then we used the Center for Epidemiological Studies Depression (CES-D) Scale, which consists of ten questions assessing depressive symptoms over the past week. Examples of questions are “I felt

Figure 6.1. Percent of Adults in Six Chicago Communities with Physician Diagnosed and Screened Depression



Source: Improving Community Health Survey

Figure 6.2. Percent of Adults with Physician Diagnosed and Screened Depression



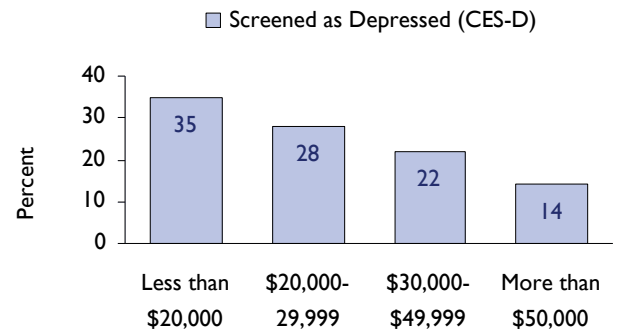
* Comparison data is the Lifetime Prevalence of Major Depressive Disorder, National Comorbidity Study, 2002

Source: Improving Community Health Survey

lonely” and “I could not get going.” This is a widely used scale.^{5,6,7} If the person’s screen indicates the presence of four or more of these symptoms, he or she is said to screen positive for depression. (However, note that this is not the same as a clinical diagnosis of depression.) Figure 6.1 presents the proportion of people who fell into either of these categories, as well as the proportion of people who fell into both. Note that overall 7% were diagnosed with depression but did not screen positive by the CES-D Scale, 16% screened positive by the CES-D Scale but had never been diagnosed, and 9% were both diagnosed and screened positive by the CES-D Scale. Thus, one-third (32%) of those in our sample had either prior or current experience with depression.

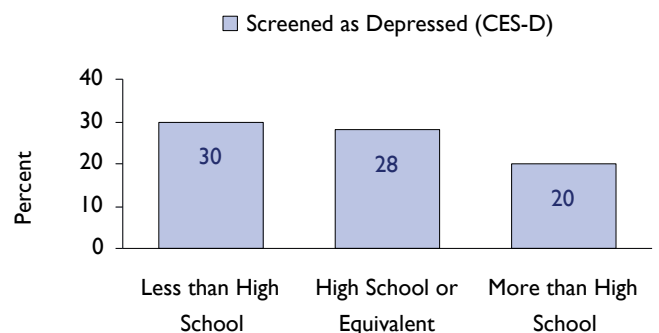
Figure 6.2 shows these relationships for each community area individually. While 25% of the sample overall screened positive for depression (16% + 9%), the majority of these people (16%) had never been diagnosed with the condition. This suggests an alarming under-diagnoses of a very serious problem, which if detected can often be successfully treated. Note also from Figures 6.3 and 6.4 that the poorer a person is and the less education a person has, the more likely that person is to exhibit depressive symptoms. This is still another example of the relationship between poor health, poverty, and general low socio-economic status.

Figure 6.3. Percent of Adults Screened as Depressed by Household Income



Source: Improving Community Health Survey

Figure 6.4. Percent of Adults Screened as Depressed by Education Level



Source: Improving Community Health Survey

Policy Considerations

Mental illness is no less real than any other physical illness, but health insurance plans typically do not give it equal coverage. It is time to treat mental illnesses like any other illness. Supporting “mental health parity” legislation, like the Senator Wellstone Mental Health Equitable Treatment Act that requires health insurance policies to cover mental health services on an equal basis with other health services, is one key policy step toward increasing the recognition and treatment of depression.

In order to overcome the cultural barriers to seeking treatment for depression and other mental illnesses, culturally competent primary care providers must also be recruited and trained to screen for mental illnesses as part of the overall physical. Physicians must also know when and where to appropriately refer people for further care.

Offering programs to provide individual and family counseling at alternative venues (i.e., community centers, churches) may also be another effective strategy for both improving outreach and struggling against stigma.

Finally, it should be obvious that if we are to properly address depression, then we must minimize or eliminate the stigma often associated with it. Too often depression is seen as a sign of weakness and the person is just urged to get things together and stop complaining, as if depression were a willed condition. Rather, we must help people understand that depression is often a logical (even if undesirable) response to the way society is arranged. For example, how should we feel if we cannot get a job? If a loved one is the victim of violence? If our neighborhood is dangerous? Thus, if we are to make progress against depression, we must understand the logic of it and its relationship to very real factors in the world. Most importantly, we should never blame the victim or stigmatize the condition. Doing so will simply chase everyone underground and away from help.

References

- ¹ Greenberg PE, Stiglin LE, Finkelstein SN, Bernt ER. Depression: A Neglected Mental Illness. *Journal of Clinical Psychiatry* 1993; 54: 419-424.
- ² SAMHSA. Mental Health: A Report of the Surgeon General. Rockville, MD: HHS, NIH 1999.
- ³ Greenberg PE, Stiglin LE, Finkelstein SN, Bernt ER. Depression: A Neglected Mental Illness. *Journal of Clinical Psychiatry* 1993; 54: 419-424.
- ⁴ U.S. Dept. of Health and Human Services. *Healthy People 2010* (Conference ed. In 2 vols). Washington, DC: U.S. Govt Printing Office, 2000.
- ⁵ Radloff LS. The CES-D Scale: A Self-Report Depression Scale for Research in the General Population. *Appl Psychol Measurement* 1977; 1:385-401.
- ⁶ Roberts RE, Vernon SW. The Center for Epidemiologic Studies Depression Scale: Its use in a Community Sample. *Am J Psychiatry* 1983; 140:41-46.
- ⁷ Frerichs RR, Aneshensel CS, Clark VA. Prevalence of Depression in Los Angeles County. *Am J Epidemiol* 1981; 113:691-9.

Topic 7. Adult Obesity

“Overweight and obesity may not be infectious diseases, but they have reached epidemic proportions in the United States. Approximately 300,000 deaths a year in this country are currently associated with overweight and obesity. Left unabated, overweight and obesity may soon cause as much preventable disease and death as cigarette smoking.”
- Surgeon General’s Call to Action to Prevent and Decrease Overweight and Obesity

Background

According to *Healthy People 2010*, obesity is one of the ten most important risk factors for morbidity and mortality,¹ and the situation has been growing worse for the past 30 years. Risk relationships have been established between obesity and diabetes,² cardiovascular disease,³ respiratory disease,⁴ and other illnesses as well.^{5,6,7} Notably, obesity has also been cited as a risk factor for lowered life expectancy.⁸ Understanding obesity as an important risk factor for disease is consistent with the view set forward by McGinnis and Foege in their seminal article suggesting that there are the usually tabulated causes of death (e.g., heart disease) and the usually not tabulated “actual” causes of death that need to be better understood (e.g., obesity).⁹ After a comprehensive analysis, these authors concluded that “diet and activity,” both of course intimately related to obesity, were responsible for 14% of all deaths in the United States. If this rate were applied to Chicago, that would mean that approximately 3,500 deaths per year are attributable to obesity. However, this rate of 14% was estimated 10 years ago, and as

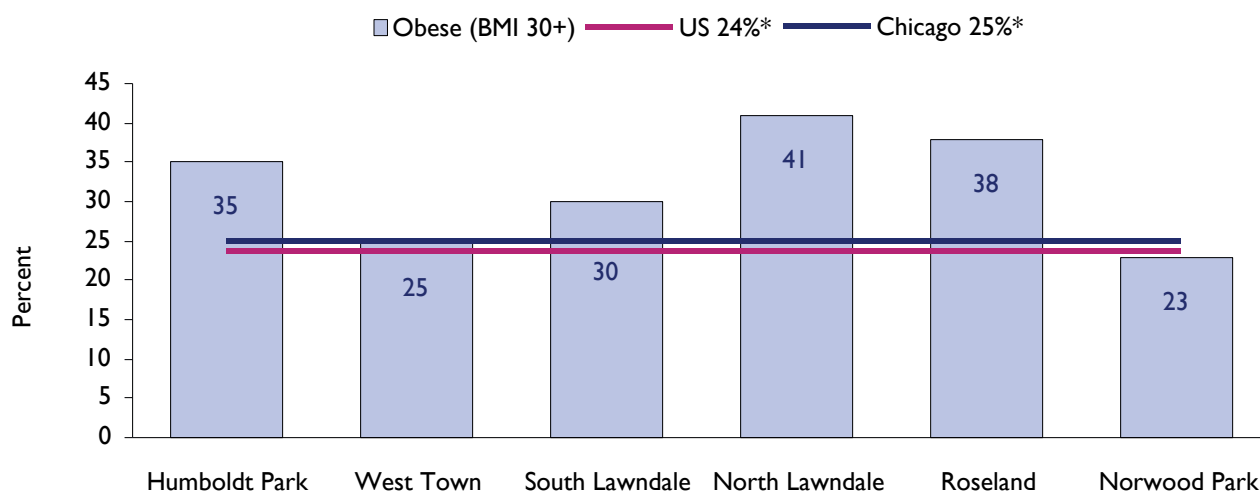
mentioned above, the prevalence of obesity continues to rise. As such, it is likely an underestimate. A more reasonable current estimate might place this number as high as 5,000 deaths per year.

In addition to the morbidity and mortality caused by obesity, there are also very large economic costs. For example, it has been estimated that the annual cost associated with obesity-related disease is about \$100 billion, a figure that does not include non-medical costs such as absence from work and school, the loss of pleasure from many activities in life, and so on.

The Survey Data

The survey contained 12 questions on adult weight status. There are many ways of measuring and defining obesity. The most commonly accepted technique is to use body mass index (BMI), which is derived from a formula that takes account of both height and weight.[†] A BMI between 25 – 29.9 kg/m² is taken to indicate that the person is “overweight.” A BMI greater than or equal to 30 kg/

Figure 7.1. Percent of Adults Who Are Obese



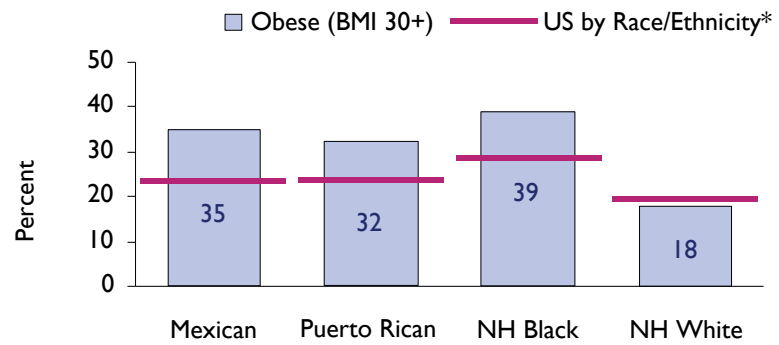
* Behavioral Risk Factor Surveillance System, 2000

Source: Improving Community Health Survey

[†] $BMI = 703 * (\text{weight in pounds}) / (\text{height in inches}) * (\text{height in inches})$

m² indicates that the person is “obese.” We asked survey respondents for their height and weight, calculated their BMI and classified them accordingly based on their BMI. The proportion of respondents who are obese is shown in Figure 7.1. As can be seen the proportion of people in these community areas who are obese is very high: 41% in North Lawndale, 38% in Roseland, and 35% in Humboldt Park. These numbers may be compared with 24% for the United States and 25% for Chicago.

Figure 7.2. Percent of Adults Who Are Obese by Race/Ethnicity



* Behavioral Risk Factor Surveillance System, 2000

Source: Improving Community Health Survey

Figure 7.2 shows the proportion that is obese by race/ethnicity. Nationally, it has been shown that disparities exist in the prevalence of obesity by race/ethnicity, with non-Hispanic Black individuals being the most likely to be obese (29%), followed by Hispanic individuals (22%).¹⁰ Our data also reveal disparities by race/ethnicity, but to a greater degree. In fact, 39% of non-Hispanic Black individuals from these six Chicago communities were obese, followed by 35% of Mexican and 32% of Puerto Rican people. The non-Hispanic White individuals surveyed were about half as likely to be obese as the non-Hispanic Black individuals.

Finally, we examined the relationship between weight and some other measures examined in the survey. Figure 7.4 shows some of these associations. For example, we see that for the whole sample combined, 14% of people who are not overweight have high blood pressure, compared with 25% of those who are overweight and 44% of those who are obese. This suggests that weighing too much is a powerful risk factor for hypertension. There is also a strong relationship between weight status and diabetes, with 14% of those who are obese having diagnosed diabetes compared with only 4% of those who are not overweight. The same sort of relationship also exists between weight status and arthritis and weight status and depression.

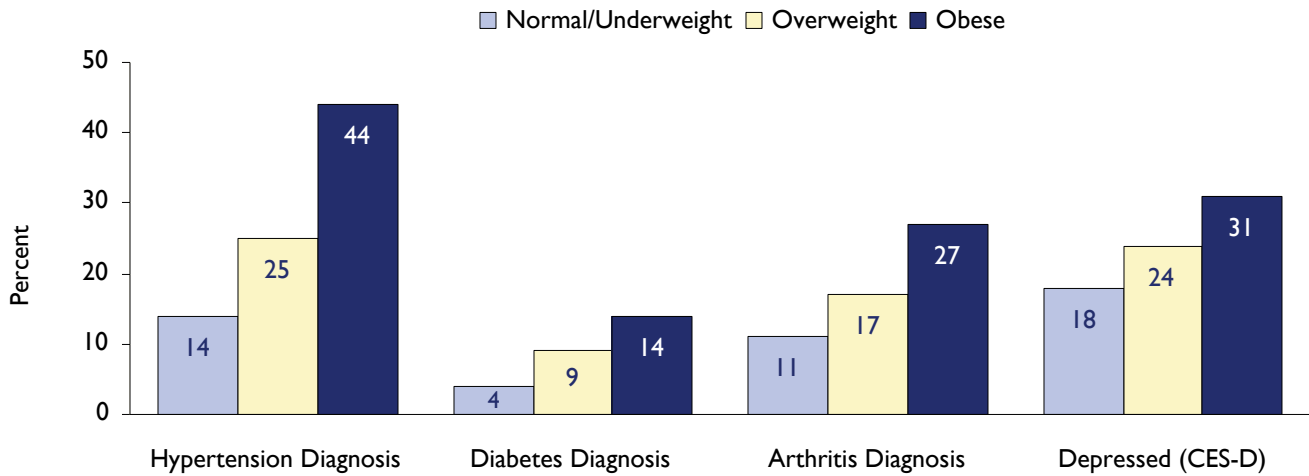
We also asked all survey respondents how they perceived their weight using the following question: “Do you consider yourself currently to be {very overweight, slightly overweight, slightly underweight, very underweight, about the right weight}?” Figure 7.3 shows the proportion of people who are either overweight or obese, but who perceived themselves to be either the right weight or underweight. Thus, about 20% of respondents who were over a desirable weight limit did not know it.

Figure 7.3. Percent of Overweight/Obese Adults Who View Themselves as the Right Weight or Underweight



Source: Improving Community Health Survey

Figure 7.4. Association of Weight Status with Other Health Measures



Policy Considerations

There are perhaps four forces that we need to improve in order to help lower obesity in Chicago’s adults. First, we need to improve the societal issues that contribute to the problem. We need more opportunities for exercise including safer parks and streets, more bicycle paths, and more workplace exercise options. We also must work against super-sized fast food deals everywhere we turn. In this last matter, it will no doubt be necessary to persuade the food industry to be more concerned about the health of the nation, a point eloquently expressed in the books *Fast Food Nation*¹¹ and *Fat Land: How Americans became the Fattest People in the World*.¹²

Second, we need to mobilize the health care community to better address this issue in a clinical setting. Doctors should be encouraged to learn more about nutrition and exercise and how to discuss the topic with their patients. As doctors can really only do so much in the limited time available to them, it would therefore be ideal to have more nutritionists available to whom a physician could refer a patient for further counseling. Currently, such counseling is sorely absent, especially to those living in the urban and often disadvantaged communities most impacted by the obesity “epidemic”.

Third, we have to call upon those who weigh more than is healthy to acknowledge the problem and to work toward fighting it by eating better and exercising more. This, of course, is easier said than done and is nearly impossible unless we provide people with the tools they need to make such a change. The aforementioned societal and health care community changes would provide a good foundation in which it would be more plausible for an individual to make a change. In addition, it would be useful to have more community-based programs available. For example, some communities organize walking clubs, thereby providing community members with an inexpensive and unique opportunity to get the exercise they need, while building relationships with others in the community. It is interesting that the solutions to a problem with such grave consequences seem so obvious, and yet they are so difficult to implement. For these reasons, it is imperative that we all work together to begin to address obesity more seriously.

As the data show, obesity is more common in poor people and in Black and Hispanic people. We have to become aware of the fact that poverty and racism are risk factors for obesity and that every factor noted above in this section is exacerbated by these two threats to our wholeness. It is essential that we understand the role of supermarkets in the provision of good foods. It is another thing to also understand that supermarkets are often not located in poor neighborhoods.¹³ It should be obvious that if people cannot find fresh fruits and vegetables, their diets will be inadequate. If there are no parks in a neighborhood, there will be less opportunity for recreation. And so on.

References

- ¹ U.S. Dept. of Health and Human Services. *Healthy People 2010*. Washington, DC: U.S. Government Printing Office, November 2000.
- ² Mokdad AH, Ford ES, Bowman BA, et al. Prevalence of Obesity, Diabetes, and Obesity-Related Health Risk Factors, 2001. *JAMA* 2003;289(1):76-79.
- ³ Kenchaiah S et al. Obesity and the Risk of Heart Failure. *N Engl J Med* 2002;347:305-13.
- ⁴ American Obesity Association. Health Effects of Obesity. AOA Fact Sheets. Available at: http://www.obesity.org/subs/fastfacts/Health_Effects.shtml.
- ⁵ American Obesity Association. Obesity in the U.S. AOA Fact Sheets. Available at: http://www.obesity.org/subs/fastfacts/obesity_US.shtml.
- ⁶ American Obesity Association. Obesity in Minority Populations. AOA Fact Sheets. http://www.obesity.org/subs/fastfacts/Obesity_Minority_Pop.shtml.
- ⁷ American Obesity Association. Women and Obesity. AOA Fact Sheets. Available at: http://www.obesity.org/subs/fastfacts/obesity_women.shtml.
- ⁸ Fontaine KR, Redden DT, Wang C, Westfall AO, Allison DB. Years of Life Lost Due to Obesity. *JAMA* 2003;289 (2):187-193.
- ⁹ McGinnis JM , Foegen WH. Actual Causes of Death in the United States. *JAMA* 1993;270:2207-12.
- ¹⁰ Behavioral Risk Factor Surveillance System, 2000
- ¹¹ Schlosser E. *Fast Food Nation*. New York: Houghton Mifflin, 2002.
- ¹² Critser G. *Fat Land: How Americans Became the Fattest People in the World*. Boston: Houghton Mifflin, 2003.
- ¹³ See the web site of the Metropolitan Chicago Information Center (www.mctic.org) and its study of the inadequate distribution of super markets in Black and Hispanic neighborhoods.

Topic 8. Pediatric Obesity

“Americans now spend more on fast food than they do on movies, books, magazines, newspapers videos, and recorded music combined. They spend more on mass-produced burgers than on higher education, or computers, or cars. More than 90 per cent of American children eat at McDonald’s at least once a month, and the average American eats three hamburgers and four orders of fries every week.” - Eric Schlosser, Fast Food Nation

Background

The preceding discussion of “Adult Obesity” (Topic 7) includes a description of the growing obesity epidemic and its implications for the health of the nation in general. The one important observation to add here is that many of the problems of obesity are intensified as the onset of obesity occurs at younger ages. Nationally, approximately one in six children are obese, with a greater proportion of non-Hispanic Black (20%) and Hispanic (24%) children falling into the obese category as compared to non-Hispanic White (11%) children.¹ The findings of a recent survey of 3,000 children, kindergarten through fifth grade, in New York City public schools reported that 24% of children are obese, and an additional 19% are overweight (*New York Times*, 7/9/03), suggesting that the problem might be more pronounced in the inner-city.

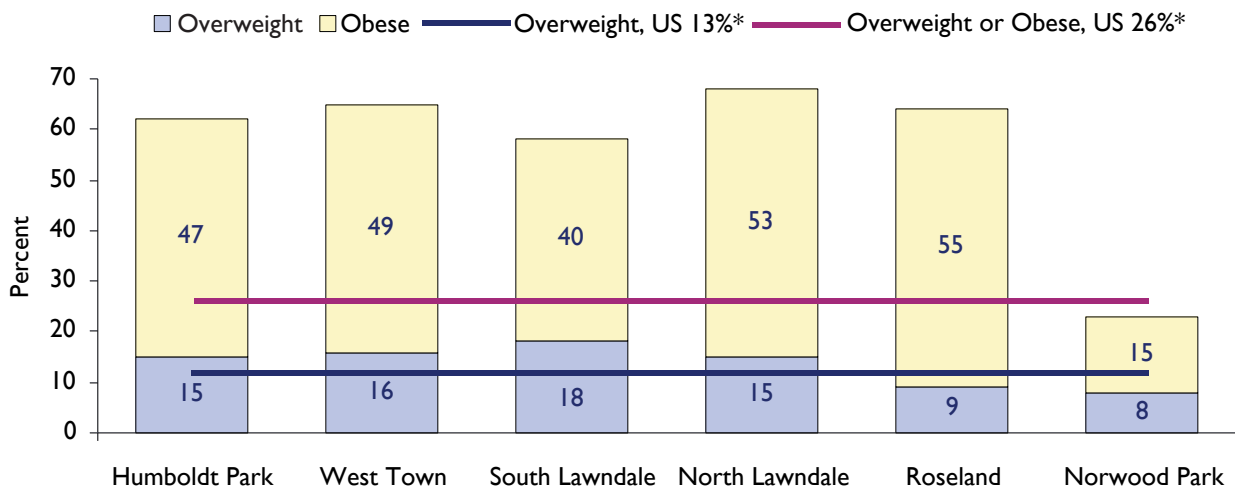
Pediatric obesity is associated with substantial morbidity such as asthma, diabetes, mental health, and adult obesity. In addition the cost associated with pediatric obesity increased from \$35 million to \$127 million (in constant dollars) between 1979 and 1999.²

The Survey Data

The child component of the survey contained seven questions on weight status, plus several additional questions on correlates of obesity such as television watching, hours of each school week devoted to Physical Education class, and eating habits. As part of the interview, parents of children were asked for the height and weight of their child and these were used to calculate each child’s body mass index (BMI) using the same formula that is used for adults. BMI was then used to classify children age 2 or older as underweight, normal weight, overweight, or obese, according to the 2000 CDC age- and gender-specific growth charts.³ For children, obesity is defined as a BMI at or above the 95th percentile for age and gender, and overweight as a BMI of at least the 85th, but less than the 95th percentile.

Figure 8.1 presents the proportion of children in these community areas who are either overweight or obese. As can be seen, the proportion of children falling into these categories is very high, absolutely and relatively. In

Figure 8.1. Percent of Children (2-12 yrs) Who Are Overweight and Obese



* Comparison data is for children ages 2-11 years, National Health and Examination Survey, 1999-2000

Source: Improving Community Health Survey

fact about two out of every three children (range: 58-68%) in five of the six community areas (the exception being Norwood Park) were either overweight or obese. That two out of three children are at an increased risk for health problems because of their weight is, in and of itself, a matter of grave concern.

When we look at the relative nature of the problem by comparing our survey findings with data from similar studies, it is revealed that the problem is worse in many of the communities surveyed than it is known to be elsewhere. Table 8.1 shows the values from our survey compared with numbers obtained from similar surveys for children nationally and for school children in New York City. (In all three cases we are focusing on data for children about age 6 - 12.) Note that 20% of Black children nationally and 23% of Black children in New York City are obese. Compare this with 52% in North Lawndale and 51% in Roseland (almost exclusively comprised of Black people). Also, with the exception of Norwood Park (the predominantly non-Hispanic White, middle-class community), obesity rates for children 6-12 years old ranged from 33%-52%. These figures are nearly two times greater than what was reported for New York City as a whole, and more than three times greater than national figures.

The magnitude of the problem revealed for the communities surveyed was so much worse than the comparative data available to us that we questioned our survey findings. In this context we spent several days reviewing all aspects of our survey from data collection to analysis. When that did not turn up anything unusual, we sought and were able to obtain height and weight data from a local school (with a large number of students from North Lawndale). The school nurse took measurements of height and weight from all children attending 2nd - 5th grade gym classes during the week. The data from the sample, comprised of 164 Black children age 6 - 12, were fully consistent with our survey results. It therefore seems likely that the problem of pediatric obesity in the inner-city neighborhoods of Chicago is worse than in most other parts of the country.

One more very important observation must be raised here. We asked the caretakers whether they perceived their children to be “overweight, underweight, or about the right weight.” Figure 8.2 shows the proportion of caretakers of overweight or obese children who thought their children were underweight or about the right weight. As can be seen, these proportions are enormous - ranging from 56 - 90% in the six communities. Thus,

Table 8.1. Percent of Children (6-12 yrs) Who are Overweight and/or Obese in Selected Chicago Community Areas Compared to National Data (NHANES) and Data Collected from NYC Schoolchildren

	% Overweight*	% Obese*	% Overweight or Obese*
NHANES, 1999-2000 (6-11 years old)	15%	15%	30%
NH White	14%	12%	26%
NH Black	16%	20%	36%
Hispanic	16%	24%	39%
NYC (Kindergarten- 5th Grade)	19%	24%	43%
NH White	--	16%	--
NH Black	--	23%	--
Hispanic	--	31%	--
Improving Community Health Survey (6-12 years old)	14%	44%	58%
Humboldt Park	13%	46%	59%
West Town	22%	51%	73%
South Lawndale	18%	33%	51%
North Lawndale	14%	52%	66%
Roseland	10%	51%	61%
Norwood Park	4%	8%	11%

* For children, overweight is defined as a BMI of at least the 85th percentile for age and gender, but less than the 95th percentile; obese is defined as a BMI at or above the 95th percentile for age and gender; Overweight and/or obese refers to the total proportion of children with a BMI at or above the 85th percentile for age and gender

Policy Considerations

While the significance of the obesity problem among U.S. adults should not be understated, the problem among children might be seen as the greater immediate priority for intervention. Obesity tends to follow children into adulthood. Therefore the need to target an intervention to children and their families living in the inner-city neighborhoods of Chicago is implicit. In fact, after an obese child reaches 6 years of age, the probability that obesity will persist into adulthood exceeds 50%.⁴ Intervention with children must include intervention with their adult caregivers as well. In fact, the presence of obesity in at least one parent puts a child at an increased risk of obesity at every age.⁵ In addition, the two largest hypothesized contributors to the problem of obesity, an inactive lifestyle and poor eating habits, are formulated in childhood and are difficult to alter in adulthood. Data from the California Children's Healthy Eating and Exercise Practices Survey (CalCHEEPS),⁶ conducted with a representative sample of 814 children between the ages of 9 and 11 statewide, support the association between these hypothesized risk factors for childhood obesity and being overweight. Specifically, children who were overweight, compared to those who were not:

- Ate fewer servings of fruits and vegetables
- Drank more servings of soda/fruit drinks
- Were more likely to have eaten high-fat snacks on survey day
- Ate fast food more often
- Spent 20 minutes longer per day watching TV or playing video games
- Were less likely to play sports outside or participate in school gym class

Given the magnitude of the problem of obesity in both children and their caregivers, and the relationship between the two, it is imperative that interventions intended to improve behaviors in both groups be immediately developed, implemented, and, of course, monitored and evaluated for effectiveness.

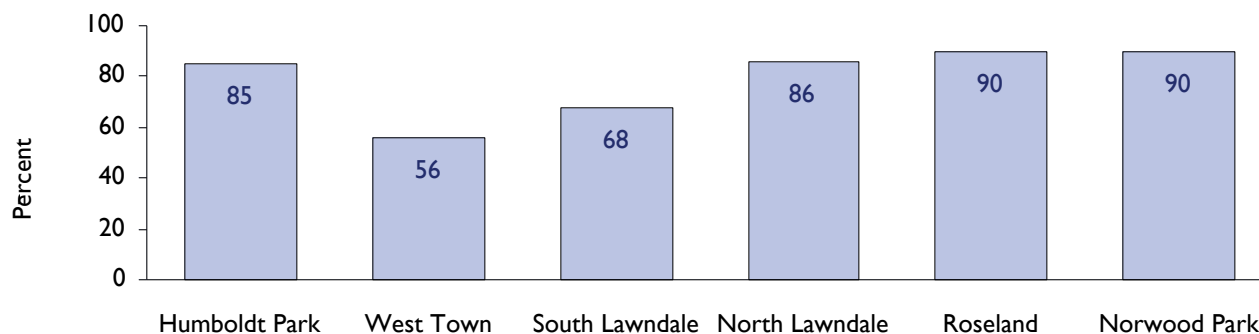
Second, the same societal issues that contribute to the problem of adult obesity are also instrumental in the development of the problem in children. As described in Topic 7, these need to be addressed with great energy.

Third, it should be obvious that an excellent place to intervene in this problem is the local school. Schools not only provide food, which could be made a lot healthier, but also interact with children for many hours a day. Surely mealtimes could serve as “teachable moments” in which the issue of healthy eating could be discussed. Genuine exercise periods could also be provided.

Fourth, we urge parents to educate themselves about the issue of pediatric obesity and to assist their children with issues associated with food consumption and physical activity and exercise.

A local data-driven childhood obesity prevention consortium, Consortium to Lower Obesity in Chicago Children (CLOCC),⁷ is working to address the problem of childhood obesity in Chicago. This consortium of researchers, public health advocates, and practitioners was organized about a year ago with the goal of confronting the childhood obesity epidemic by promoting healthy and active lifestyles for children throughout the Chicago metropolitan area. The group helps those with an interest and passion for the subject to connect with one another, and also with children, families, and the communities of Chicago. By coming together to share knowledge and experiences and to collectively devise solutions, the group can assure that the resources available to address the problem are being utilized in the best possible way.

Figure 8.2. Percent of Caretakers of Overweight/Obese Children (2-12 yrs) Who View Their Child as the Right Weight or Underweight



Source: Improving Community Health Survey

it seems caretakers overwhelmingly misjudge their children's weight and may be misinformed about their health risks. Of course, many issues such as cultural practices and perceptions are involved and must be respected. Nonetheless, we have to find a way to educate caretakers about the optimal weight for their children and their health. Otherwise most efforts to improve the situation will not be effective.

We know that obesity is a national epidemic and that the situation is growing worse each day. This survey allows us to see that the values for pediatric obesity in parts of Chicago are even worse than they are for the United States as whole or for New York City public school students. Local level data from other parts of the country would be useful in further defining the obesity epidemic and in targeting resources to those areas most in need of them.

References

- ¹ Ogden CL, Flegal KM, Carroll MD, Johnson CL. Prevalence and trends in overweight among U.S. children and adolescents, 1999-2000. *JAMA* 2002; 288(14):1728-1732.
- ² The Center for Health and Health Care in Schools at <http://www.healthinschools.org/sh/obesityfs.pdf>.
- ³ http://www.cdc.gov/nchs/about/major/nhanes/growthcharts/clinical_charts.htm.
- ⁴ Whitaker RC, Wright JA, Pepe MS, et al. Predicting obesity in young adulthood from childhood and parental obesity. *N Engl J Med* 1997; 337: 869-873.
- ⁵ Ibid.
- ⁶ California Endowment. Special Report on Policy Implications from the 1999 California Children's Healthy Eating and Exercise Practices Survey (CalCHEEPS) at <http://www.calendow.org/pub/publications/calcheeps050701.pdf>.
- ⁷ See the CLOCC web site at www.clocc.net

Topic 9. HIV/AIDS

“Despite the enormous success in HIV prevention over the past decade, there are additional prevention challenges. The populations that need to be reached by prevention interventions have changed considerably. Women, youth, and racial and ethnic minorities now account for a growing proportion of new AIDS cases.”
- Institute of Medicine, *No Time to Lose: The AIDS Crisis is Not Over*¹

Background

Since the beginning of the AIDS epidemic, around 1980, there have been 20,762 diagnosed cases of AIDS and 11,644 HIV/AIDS deaths in Chicago. It is additionally estimated that there are now between 15,000 – 20,000 people living with HIV in the city. The epidemic in Chicago (and in the rest of the western world) started among men who have sex with men. Now, however, the epidemic in Chicago affects all segments of society. The latest data from the Chicago Department of Public Health reveal that current AIDS cases are distributed as follows: 23% among women (up from 12% 10 years ago); 66% among Black people (up from 49%) and 16% among Hispanic people (up just slightly from 13%) with much higher rates among Puerto Ricans than Mexicans.

Available data also indicate a dramatic shift in how the virus is transmitted. Ten years ago male-to-male sexual activity was the largest transmission category. Today, both in Chicago and the rest of the U.S., increasing numbers of

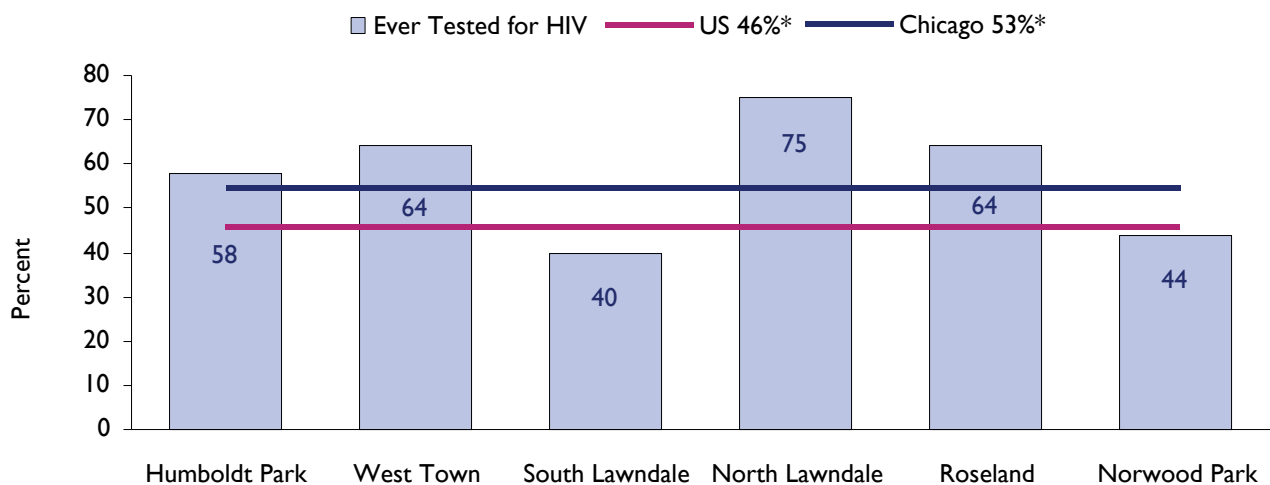
people are being infected by contaminated needles and heterosexual contacts.²

The Survey Data

The adult survey contained 12 questions about HIV/AIDS and sexually transmitted diseases. Respondents were asked if they “had ever been tested for HIV, the virus that causes AIDS.” Figure 9.1 shows that substantial proportions of people answered “yes” to this question: 75% in North Lawndale, 58% in Humboldt Park, 44% in Norwood Park, and only 40% in South Lawndale. These proportions are notably higher than national averages and are also consistent with which communities are being hardest hit by the epidemic.

We also asked respondents if they favored or opposed the distribution of information about HIV/AIDS and sexually transmitted diseases (STDs) in schools. Virtually everyone in all communities favored the distribution in high schools and a huge proportion, about 90% in some

Figure 9.1. Percent of Adults Who Have Ever Been Tested for HIV



* Behavioral Risk Factor Surveillance System, 2000

Source: Improving Community Health Survey

Table 9.1. Percent of Adults Who Favor HIV Prevention Activities in Schools

	Favor HIV/STD Information Distribution in High Schools	Favor HIV/STD Information Distribution in Elementary Schools	Favor Providing Condoms in High Schools	Favor Having a Needle Exchange Program in the Community
Humboldt Park	95%	90%	90%	60%
West Town	100%	93%	92%	74%
South Lawndale	94%	89%	87%	61%
North Lawndale	97%	91%	89%	58%
Roseland	97%	92%	86%	62%
Norwood Park	98%	82%	69%	66%

Source: Improving Community Health Survey

Policy Considerations

Several of us have in the past worked on different policy issues related to these questions. Without exception, opposition to the distribution of HIV/AIDS/STD information, condoms, or clean needles is always couched in the context that people in the communities do not want these things. And always these assertions are made without any data. We now have data and the information speaks loudly and clearly to what people want.

One way to help curb the HIV epidemic in Chicago is to make condoms readily available in high schools. We can see from the survey information that virtually all survey respondents favor the distribution of condoms in high schools. Yet note that not one single high school in Chicago currently distributes condoms. We have been informed by a Chicago Public Schools representative that condoms may be obtained in school-based health clinics in 15 high schools (out of a total of 79) from a school nurse but even then only with parental consent. Evaluations in Massachusetts,³ New York City,⁴ and Seattle⁵ high schools showed that making condoms readily available did NOT increase the rates of sexual activity. In addition, two of the three studies also showed an increase in condom use among sexually active youth.^{6,7} This evidence, combined with the fact that the community areas favor condom distribution in high schools, suggests that such a policy should be implemented immediately.

The first needle exchange program (NEP) opened in the United States in 1986 to help fight the HIV epidemic that was quickly spreading among intravenous drug users. Since then, policymakers, researchers, and neighborhood members have had legitimate concerns about the impact that NEPs would have on their communities. For instance, some of the questions raised included: Do NEPs even work? Will they increase injection drug use among current users? Will they encourage injection drug use among non-users or youth? Will they increase the number of discarded needles on the streets? Will they increase crime rates? In response to these concerns, we know that first, there is strong evidence that NEPs can be effective in lowering the rate of HIV.^{8,9,10} Second, research also indicates that NEPs do not encourage or increase injection drug use,^{11,12} do not increase the number of discarded needle on the streets,^{13,14} and do not increase crime rates in the neighborhood.¹⁵ Finally, the majority of community members we interviewed favor having needle exchange programs in their communities. Therefore, given the support from the community and the strong indication that NEPs can help suppress the HIV epidemic ravaging these communities, policy makers should support new and existing NEPs.

community areas, favored the distribution in elementary schools.

We asked the same question about the distribution of condoms: “Do you favor/oppose providing condoms in high schools?” We were very surprised by how many people favored this distribution. With the exception of Norwood Park, about 90% of all respondents said they favored this distribution in high schools. Even in Norwood Park, 69% favored distribution of condoms in its high schools (Table 9.1).

Finally, we asked “Do you favor or oppose putting a needle exchange program in your community, which would offer clean needles to IV (intravenous) drug users in exchange for dirty needles?” The proportions in favor of needle exchange programs were also high, ranging from a low of 58% in North Lawndale to a high of 74% in West Town (Table 9.1).

Note that the responses to all of these policy-related questions took place without any prior education campaigns. For example, no one went into the communities and held workshops or seminars on any of these topics in order to encourage a particular opinion. It is also important to note that the responses to these questions are overwhelmingly different from what we are told people want or think.

References

- ¹ Institute of Medicine. *No Time to Lose: The AIDS Crisis is Not Over*. Washington, D.C.: National Academy Press, 2001, p. 2.
- ² All data supplied by the Office of HIV/AIDS Surveillance of the Chicago Department of Public Health.
- ³ Blake SM, Ledsky R, Goodenow C, Sawyer R, Lohrmann D, Windsor R. Condom Availability Programs in Massachusetts High Schools: Relationships with Condom Use and Sexual Behavior. *Am J Public Health* 2003;93:955-962.
- ⁴ Guttmacher S, Lieberman L, Ward D, Freudenberg N, Radosh N, Desjarlais D. Condom Availability in New York City Public High Schools: Relationships to Condom Use and Sexual Behavior. *Am J Public Health* 1997;87:1427-1433.
- ⁵ Kirby DB, Brener N, Brown NL, Peterfreund N, Hillard P, Harrisst R. The Impact of Condom Distribution on Seattle Schools on Sexual Behavior and Condom Use. *Am J Public Health* 1999;89:182-187.
- ⁶ Blake SM, Ledsky R, Goodenow C, Sawyer R, Lohrmann D, Windsor R. op. cit.
- ⁷ Guttmacher S, Lieberman L, Ward D, Freudenberg N, Radosh N, Desjarlais D. op. cit.
- ⁸ Des Jarlais DC, Marmor M, Paone D, et al. HIV Incidence Among Injection Drug Users Participating in New York City Syringe-Exchange Programmes. *Lancet* 1996;348:987-991.
- ⁹ Des Jarlais DC, Perlis T, Friedman SR, et al. Behavioral Risk Reduction in a Declining HIV Epidemic: Injection Drug Users in New York City, 1990-1997. *Am J Public Health* 2000;90:1112-1116.
- ¹⁰ Raboud JM, Boily MC, Rajeswaran J, O’Shaughnessy MV, Schechter MT. The Impact of Needle-Exchange Programs on the Spread of HIV Among Injection Drug Users: A Simulation Study. *J Urban Health* 2003 Jun; 80:302-20.
- ¹¹ Marx MA, Beilenson P, Brahmabhatt H, et al. According to City High School Students, Needle Exchange Programs Do Not Encourage Them to Use Illicit Drugs. Paper presented at: 127th Annual Meeting of the American Public Health Association, Chicago, IL, Nov 7-11, 1999.
- ¹² Fisher DG, Fenaughty AM, Cagle HH, Wells RS. Needle Exchange and Injection Drug Use Frequency: A Randomized Clinical Trial. *J Acquir Immune Defic Syndr*. 2003 Jun;33:199-205.
- ¹³ Doherty M, Garfein R, Vlahov D, et al. Discarded Needles Do Not Increase Soon After the Opening of a Needle Exchange Program. *Am J Epidemiol* 1997;145:730-737.
- ¹⁴ Doherty MC, Junge B, Rathouz P, Garfein RS, Riley E, Vlahov D. The Effect of a Needle Exchange Program on Numbers of Discarded Needles: a 2-Year Follow-up. *Am J Public Health* 2000;90:936-939.
- ¹⁵ Marx MA, Crape B, Brookmeyer RS, Junge B, Latkin B, Vlahov. Trends in Crime and the Introduction of a Needle Exchange Program. *Am J Public Health* 2000;90:1933-1936.

Topic 10. Health-Related Quality of Life

“Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.”
- World Health Organization¹

Background

Health in the United States has traditionally been measured by the presence of a disease in its most severe manifestations (i.e., diagnosis with diabetes, testing positive for HIV, death from breast cancer). Such measures reveal little about other important aspects of health, such as, the disability and dysfunction associated with disease, overall emotional health, or the impact of domestic violence. Because people generally only go to the doctor when they feel sick (and even then only if they are fortunate enough to afford it), relying solely on clinical diagnoses as measures of health is vastly inadequate. Doing so will underestimate the true burden of poor health in the community.

As it turns out, asking people to assess their own health is a useful measure of a person’s state of complete physical, mental, and social well-being. In fact, numerous studies have shown that people’s own perception of their overall health is remarkably accurate and can be used to predict future health care needs, as well as five- and ten-

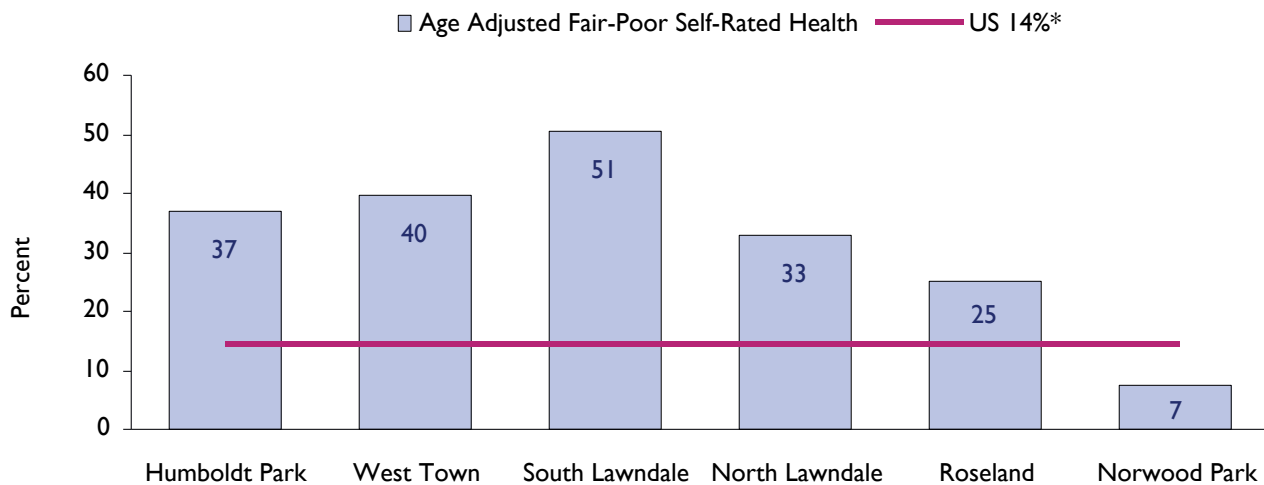
year mortality.^{2,3,4,5,6} We refer to this global measure of health as health-related quality of life (HRQOL).

The Survey Data

The adult survey contained 18 questions on health-related quality of life (HRQOL). One way we measured this was by asking respondents, “Would you say that in general your health is excellent, very good, good, fair, or poor?” This is a widely used assessment of self-perceived health included on many national surveys. Fair-Poor self-rated health has been found to be highly predictive of future death and disability. Because age is strongly associated with declining health, age-adjusted rates of self-rated health for each community are shown in Figure 10.1. Note the excessive disparities in self-rated health between these communities. Most significantly, South Lawndale has a rate of fair-poor self-rated health more than seven times as great as Norwood Park (51% vs. 7%).

Another way we measured HRQOL was to ask respondents two questions, “How many days in the past

Figure 10.1. Percent of Adults with Fair or Poor Self-Rated Health, Adjusted for Age



* Behavioral Risk Factor Surveillance System, 2001

Source: Improving Community Health Survey

Figure 10.2. Average Number of Unhealthy Days by Self-Rated Health



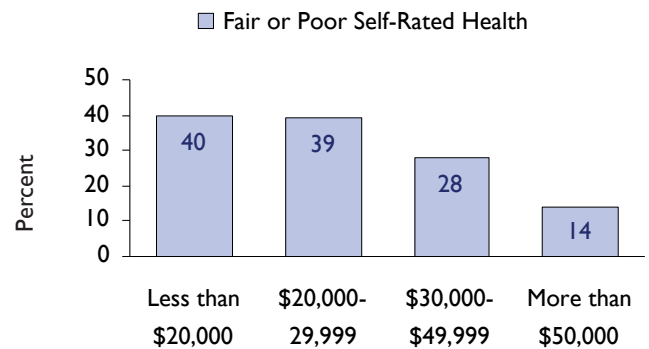
Source: Improving Community Health Survey

30 days was your physical health not good?” and “How many days in the past 30 days was your mental health not good?” Responses to the two questions are then summed, with a logical maximum of 30 Unhealthy Days.⁷ For example, a person with three physically unhealthy days and two mentally unhealthy days is assigned a value of five Unhealthy Days, and someone who reports 16 physically Unhealthy Days and 15 mentally Unhealthy Days is assigned the maximum of 30 Unhealthy Days. This measure is also used on many national surveys.^{8,9} Figure 10.2 shows that self-rated health and the average number of Unhealthy Days are directly related. Those in excellent health report about 3 Unhealthy Days per month and those in poor health report 17 Unhealthy

Days per month. Figure 10.3 shows the relationship between fair or poor self-rated health and income. Here is still another example of the relationship between poor health and poverty.

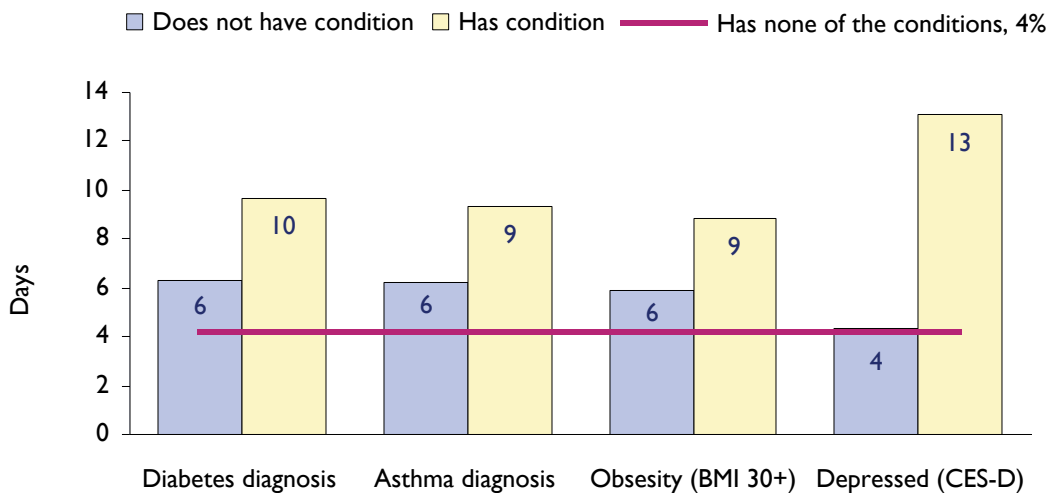
Figure 10.4 shows the mean number of Unhealthy Days for selected health conditions: asthma, obesity, diabetes, and depression. Note that those without a chronic health condition report fewer Unhealthy Days than those suffering from a chronic health condition. Depression is especially burdensome, with an average number of 13 Unhealthy Days for those screening positive for depression compared to four Unhealthy Days for those free from depression symptoms.

Figure 10.3. Percent of Adults with Fair or Poor Self-Rated Health by Household Income



Source: Improving Community Health Survey

Figure 10.4. Average Number of Unhealthy Days for Selected Health Conditions



Source: Improving Community Health Survey

Policy Considerations

Health-related quality of life is more likely than other health outcomes to capture the burden of under-diagnosed and under-reported health conditions in a community. We therefore encourage researchers as well as clinicians to pose these questions as often as possible. This will allow us to understand the overall health of individuals better (and not merely rely on upon existing diagnoses). It will also allow us to begin to accumulate data describing how different groups of people in different communities respond to these questions.

Measures of HRQOL are also useful for health planners and legislators in assuring that resources are allocated appropriately to communities. HRQOL vividly illustrates the impact of particular diseases, such as depression, on individuals and can help planners to target funds toward health conditions that cause the greatest disability in a community.

Lastly, HRQOL provides more evidence that health and socio-economic status are inextricably linked. Therefore potential interventions for improving community health should include a wide range of activities. For example, improving the quality of primary school education, expanding employment opportunities, and strengthening local economies can all be considered interventions for improving health-related quality of life.

References

- ¹ World Health Organization, 1948.
- ² Idler EL, Russell LB, Davis D. Survival, Functional Limitations, and Self-Rated Health in the NHANES I Epidemiologic Follow-up Study, 1992. *Am J Epidemiology* 2000; 152:874-83.
- ³ McGee DL, Liao Y, Cao G, Cooper RS. Self-Reported Health Status and Mortality in a Multiethnic US Cohort. *Am J Epidemiology* 1999; 149:41-6.
- ⁴ Idler EL, Benyamini Y. Self-Rated Health and Mortality: A Review of Twenty-Seven Community Studies. *J of Health and Social Behavior* 1997; 38(March):21-37.
- ⁵ Idler EL, Ronald JA. Self-Rated Health and Mortality in the NHANES-I Epidemiologic Follow-up Study. *Am J Public Health* 1990; 80:446-452.
- ⁶ Kaplan GA, Goldberg DE, Everson SA, et al. Perceived Health Status and Morbidity and Mortality: Evidence from Kuopio Ischaemic Heart Disease Risk Factor Study. *Int J Epidemiol* 1996; 25(2):259-265.
- ⁷ Centers for Disease Control and Prevention. Measuring Healthy Days. Atlanta, GA: CDC, November 2000.
- ⁸ Hennessy CH, Moriarty DG, Zack MM, Scherr PA, Brackbill R. Measuring Health-Related Quality of Life for Public Health Surveillance. *Public Health Reports* 1994; 109:665-72.
- ⁹ CDC. Quality of Life as a New Public Health Measure—Behavioral Risk Factor Surveillance System, 1993. *MMWR* 1994; 43:375-80.

Section 6. Racial and Ethnic Disparities

*“Of all the forms of inequality, injustice in health is the most shocking and the most inhumane.”
- Dr. Martin Luther King, Jr., National Convention of the Medical Committee for Human Rights, Chicago 1966*

Since 1980 the United States has been setting goals for improved health that it wishes to accomplish in the following ten years. Thus, in 1980 the Federal Government set goals for 1990, in 1990 for 2000, and just recently the government finished setting goals for 2010. These are part of the Healthy People Initiative.¹ The goals are in all areas of health and generally there are about 500 of them, including infant mortality, heart disease mortality, asthma hospitalizations, etc. In addition to these goals there have been two or three overarching goals. In 2000, one of the three overarching goals was to “Reduce health disparities among Americans,” i.e. among different groups (like Black and White people).² For 2010, one of the two overarching goals is to “Eliminate health disparities.” Despite these pursuits, and quite a bit of associated attention, racial disparities in health for the United States improved only slightly between 1990 and 1998.³ In addition, matters are worse in Chicago. For example, a study that the Sinai Urban Health Institute carried out examined indicators of health between 1980 and 1998. We found that Black:White disparities actually increased (that is, became worse) in Chicago during this time for 20 of the 22 health indicators that we studied.⁴ The U.S. study noted above found that matters improved (although only slightly) for 11 of 14 Health Status Indicators. When we precisely replicated this study for Chicago, we found that disparities grew worse for 11 of the 14 Health Status Indicators, exactly opposite what was happening for the country as a whole.⁵

We viewed this survey as a chance to further examine disparities in the city. Norwood Park is almost all White and is the richest of these six communities (but is still only the tenth richest community area in the city.) Thus, comparison of the other five community areas to Norwood Park should give us some sense of the extent of existing disparities in health measures that cannot be obtained from already existing databases.

In the previous section we examined ten topics that were selected from the study. One of them (HIV/AIDS) involves only opinion. For the remaining nine topics we proceeded as follows. First, we ranked each community area on each measure: “1 = best rating” and “6 = worst

rating.” Then we added up the nine scores. The best rating would thus be 9 and the worst would be 54. What we found was that Norwood Park, the middle class White community area in the survey, scored best (11) on this comparative index while Humboldt Park (41) and North Lawndale (37) scored worst. This is not unique to these 9 measures. The trend exists for measures throughout the survey, which are not discussed in this report. That is, generally, Norwood Park had the best measures of health, while Humboldt Park and North Lawndale had the worst. We have generated many other tables that are not presented in this report. Some of them are arranged by race and ethnicity rather than by community area. In virtually every table White people do best and either Black or Puerto Rican people do worst.

Consider three specific examples of these disparities:

- About 40% of adults in North Lawndale had no health insurance at the time of the survey. This may be compared to 56% in South Lawndale, and 7% in Norwood Park. Thus, an adult in North Lawndale was about six times more likely to be uninsured than an adult in Norwood Park and an adult in South Lawndale was nine times more likely to be uninsured. Recall, also, that Roseland had a median household income that was the same as that for Chicago. Yet, 32% of its residents have no health insurance. Not much of a safety net!
- As a second example, consider diabetes. Only 4% of White people in our survey report having been diagnosed with this disease compared with 13% of Black people – more than a three-fold difference.
- Finally, consider pediatric asthma. For this condition we have seen that 34% of Puerto Rican children and 25% of Black children likely have asthma compared to 20% of White children.

We repeat here for emphasis that Norwood Park is not nearly the richest community area in the city and North

Lawndale is not nearly the poorest. Had we selected community areas at the extremes, the disparities almost certainly would have been far more severe.

The situation is thus perplexing indeed. Most people, we think, would agree that it should not be that poorer people and Black people (and other non-White people) should suffer from worse health – and yet they do. This is not a situation that is unique to these community areas or to Chicago, although the problem appears to be particularly severe here. Surely we must together find a way to improve the health of all people and eventually arrange matters so that health, and even life and death, are not driven by the color of one's skin or how much money one has.

References

- ¹ U.S. Dept. of Health and Human Services. *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. Washington, DC: U.S. Govt Printing Office, 1991. DHHS publication 91-50212.
- ² US Department of Health and Human Services. *Healthy People 2010: Understanding and Improving Health*. 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000.
- ³ Keppel KG, Pearcy JN, Wagner DK. Trends in racial and ethnic-specific rates for the Health Status Indicators: United States, 1990-98. In: *Healthy People Statistical Notes. No. 23*. Hyattsville, MD. National Center for Health Statistics: 2002.
- ⁴ Silva A, Whitman S, Margellos H, Ansell D. Evaluating Chicago's Success in Reaching the Healthy People 2000 Goal of Reducing Health Disparities. *Public Health Reports* 2001; 116:484-494.
- ⁵ Margellos H, Silva A, Whitman S. Black-White Disparities in Health Status Indicators: Are They Worsening in Chicago? *American Journal of Public Health* 2004; 94 (1).

Section 7. Overarching Policy Implications

We presented ten topics (sets of findings) from our survey. For each one we discussed some policy implications specific to the topic. The purpose of this section is to offer some overarching observations that we hope will lead us in some optimal policy directions.

- 1) Our overarching motivating reason for conducting this survey was to help improve health conditions. Penultimately, we believed that city, or national-level data would not be adequate to describe health at the local level and that local survey data would thus be essential. In this we were proven correct. For measure after measure it is obvious that national (or even city data when they exist) do not inform us very well about what is happening at the community level, which is precisely where we would like to place interventions to improve matters. **Thus, we suggest that national, state, and local governments conduct local area surveys like this one on a regular basis. In an environment of financial constraint it is essential that resources be applied where they can do the most good, and with the intelligence that such surveys can provide.** We have carried out extensive calculations and found that it would not be prohibitively expensive to implement such surveys.
- 2) Virtually every health issue discussed in this report is amenable to prevention. Prevention implemented effectively will eliminate the need for much treatment. It will also improve health more and cost less. Yet, in the United States, prevention is only a tiny part of the health budget. **We urge Chicago (and, indeed, the country) to turn its attention and resources toward prevention and screening measures rather than concentrating overwhelmingly on treatment. The costly treatment of chronic diseases eats at the fabric of our health care system. We can be better served by prevention, and early detection and intervention.**
- 3) Health education and health care education are sorely lacking among the populace at large. The education of health care professionals about how to educate their patients is lacking as well. **We urge investment in education of professionals and the public aimed at improving lifestyle. Incentives to avoid risky choices and encourage personal responsibility have the potential to reshape our approach to healthy, productive life.**
- 4) The results describing the health of the children of these communities are dismaying to say the least. Lack of insurance for all, asthma, obesity, and lack of provision of HIV/STD information all portend ill for the future. For example, as we discussed above (Topic 8), a child who is obese often becomes an adult who is obese. This in turn may lead to diabetes, hypertension, depression, and less than optimal productivity in society. **In order to protect the future of our communities, we urge the creation of successful initiatives that assure access to excellent health care for all children in the city.**
- 5) One cross-cutting issue for all of these measures of health is the question of equitable access to medical care. The prestigious Institute of Medicine's recent report, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*,¹ speaks passionately to this question. The IOM found that at every step White people receive more care and higher quality care than people who are not White. In another report, *Care Without Coverage: Too little, Too Late*,² the IOM found that such inferior care was literally a matter of life and death as Black and Hispanic people died sooner and at higher rates as a result of the lack of health insurance. As our survey shows, this lack of insurance is even worse in Chicago than it is nationally. This is not acceptable and a way must be found to guarantee suitable and equitable health care for all. Adding intensity to this concern is that poverty in four of the six community areas we surveyed (and in many other communities in Chicago) is very serious. **It is well documented that payment disparity has an adverse effect on the health of communities. We must work to establish universal access to quality health care.** Every other industrialized country in the world has a system that pursues this goal: we recommend it for the United States. If the nation does not have the will to provide such a system, then Illinois must take action on its own.

6) In almost every instance, the richest community area had the best measures of health and the poorest areas had the worst measures. In most cases this was also a comparison of White and Black people. Although these community areas are not necessarily representative of the entire city and cannot be generalized that way, they do offer still more evidence, in addition to the studies we have already conducted and published in professional journals, that the problem of disparities in the city is a very severe one. **We must recognize and then eliminate racial and other societal disparities in health in Chicago.** In fact, whether and how we deal with this problem will say a lot about whether health will improve for Chicago as a whole. It will also say a lot about us as a people and a democracy.³

Although structural issues like racism and poverty are responsible for many of the negative findings in this survey, we shouldn't wait until these issues are eliminated before we act. We need to take on health issues one at a time, at the local level, beginning now, regardless of how daunting the task may seem. We can begin today to work on each and every one: asthma, obesity, smoking, depression, diabetes, and so on. They all are associated with quite successful preventive and ameliorative steps. There is no other choice.

References

- ¹ Institute of Medicine. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. Washington, D.C.: National Academies Press, 2003.
- ² Institute of Medicine. *Care Without Coverage: Too Little, Too Late*. Washington, D.C.: National Academies Press, 2002.
- ³ Whitman S. Racial Disparities in Health: Taking It Personally [editorial]. *Public Health Reports* 2001; 116: 387-389.



**Sinai Urban Health Institute
Mount Sinai Hospital
1500 South California, K-439
Chicago, IL 60608**

<http://www.sinai.org/urban/index.asp>