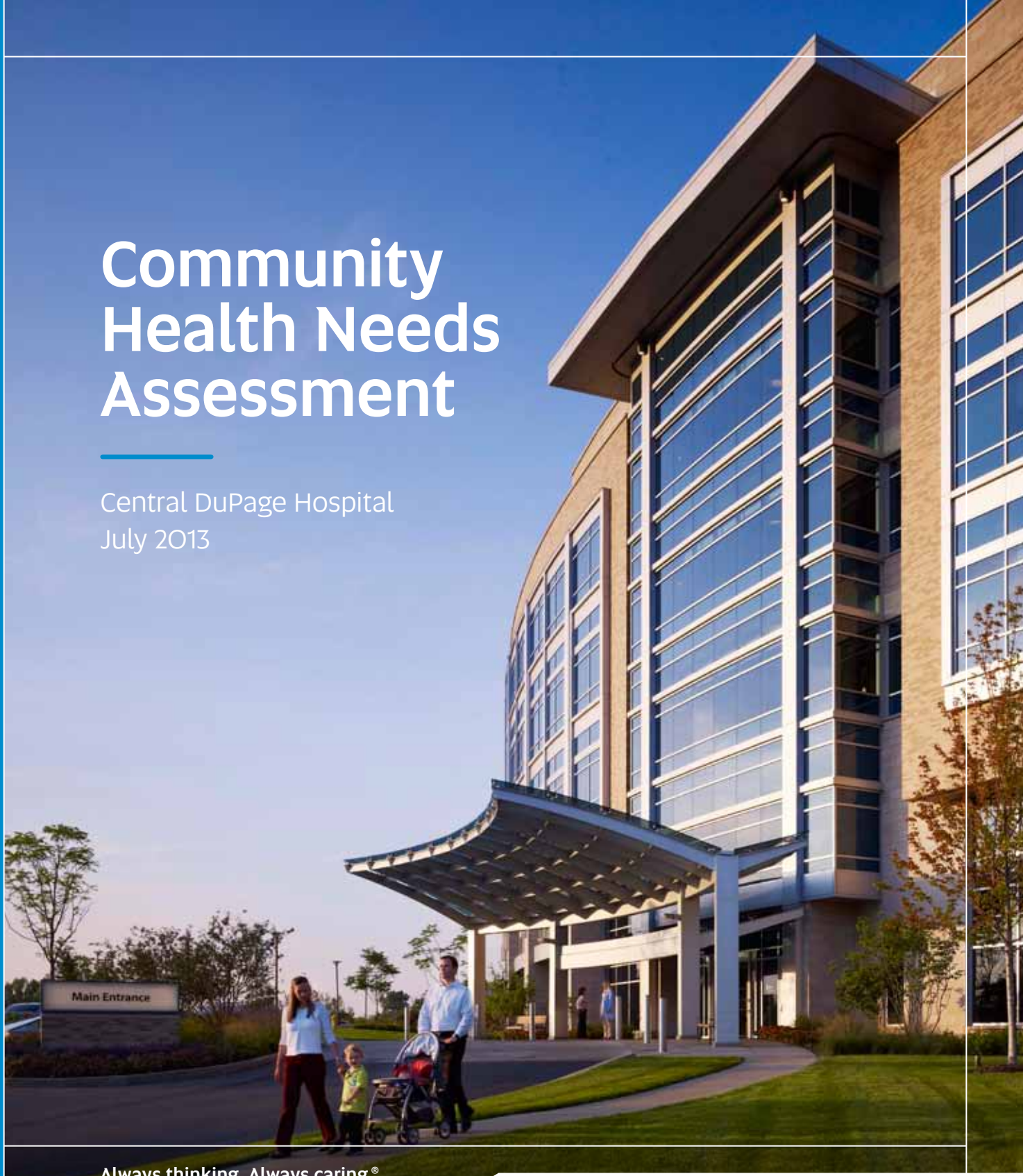
Community Health Needs Assessment

Central DuPage Hospital
July 2013



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Executive summary

Maintaining awareness of a community's healthcare needs is imperative in an environment as dynamic and diverse as Chicago's western suburbs and requires significant planning and accommodation.

Our aging population will require more advanced acute care services including stroke, heart and vascular, orthopedic, and cancer care. Wellness and prevention programs targeting middle-age and older adults will be needed to mitigate the impact of these conditions.

At the same time, the influx of young working families will require outstanding women and children's services, wellness programs, and preventive care. A growing and diverse lower income population will require access to affordable, culturally-sensitive services. The community will also need accessible health care facilities and an additional language interpretation capacity to serve the increasing number of individuals with limited English language proficiency.

Central DuPage Hospital (CDH) is well positioned to respond to many of these growing community needs. We are able to do this in part because CDH is a not-for-profit hospital and we reinvest every dollar earned beyond expenses back into services that benefit our community.

The successful implementation of a community benefit strategy requires a comprehensive assessment of need and an understanding of how to respond to those needs which have been identified. CDH conducts a comprehensive community health needs assessment (CHNA) every three years, and develops a targeted strategy plan (Community Benefit Plan) to respond to the priority needs identified.

CHNA information is gathered from government and private studies as well as directly from community members and key stakeholders to help identify and prioritize needs to be addressed by the hospital. The plan is reviewed annually and updated to reflect any new information or changes in the community. The resulting CHNA not only provides guidance for formulating CDH's annual Community Benefit Plan, but also guides our clinical service and strategic planning processes.

No one institution can comprehensively address all health needs of a community – nor can it work independently of other key community stakeholders and existing outside initiatives. Therefore, this community needs assessment also considers the strengths and expertise of CDH in the context of other community resources. Based upon the summary data provided in this report, we have identified and given priority to the needs we are uniquely suited to address and have also identified those which are better addressed in partnership with other health care providers, community groups and government agencies.

By 2030, the number of DuPage County residents age 60 and over will have increased 133% from 2000.

Demographics and vital statistics

By 2030, the number of DuPage County residents age 60 and over will have increased 133 percent from 2000, according to estimates by the U.S. Census Bureau. This will drive community need for a range of acute care services including heart and vascular, stroke, and cancer care. The need for resources to manage the chronic conditions more commonly found in older populations and to promote healthy lifestyles will also increase significantly.

The minority population of DuPage County, particularly the Hispanic population, is also expected to continue growing. This is likely to create greater need for outreach and culturally-sensitive clinical programs that address the unique needs of an increasingly diverse population.

Challenges of rising poverty and limited English proficiency

While DuPage County traditionally has been among the most affluent in Illinois, in recent years the number of low-income households has increased sharply. The percentage of residents earning below 200 percent of the Federal Poverty Level grew nearly 28 percent from 2000 to 2005, according to the DuPage Federation on Human Services Reform. The recent economic downturn has accelerated this trend, and has sharply increased the number of unemployed and uninsured as well. Because DuPage County lacks a public hospital system, private hospitals, including CDH, and other providers will be challenged to provide affordable care as this low-income population continues to grow.

The foreign-born and non-English speaking populations of DuPage County are also rising, with 26 percent of residents speaking a language other than English at home. Informing this population of available services and communicating with them to deliver services requires additional resources.

Child and maternal health

Because of the relatively small sample size, the DuPage County infant mortality rate fluctuates. While the mortality rate has averaged about 5.2 deaths per 1,000 births in recent years, it has also peaked at 7.4 in 2006, then declined sharply to a low of 4.6 in 2007. The average since 1991 is below the Healthy People 2020 target of 6.0 deaths per 1,000 births; however, the spikes in recent years indicate instability in these averages. There is a need for additional effort to improve prenatal and perinatal care, and to target high-risk groups such as teenagers and older women of childbearing age. Also, infant mortality rates among African-Americans are historically higher than for Caucasian residents of DuPage County, suggesting that interventions targeting this population may help.

Heart disease, cancer and accidents leading to losses of life

In recent history, heart disease and cancer have been the leading causes of death among adults in DuPage County, accounting for nearly half of deaths. However, accidents, the fifth leading cause of death overall at just 3.4 percent,

were the second leading cause of years of potential life lost because on average, accident victims were much younger. Accidents, particularly auto accidents, were the leading cause of death among adults age 18 to 44, with rates among men substantially higher than women.

The prevalence of heart disease, stroke, and cancer as causes of death among older adults combined with the aging population in DuPage County, suggests a growing need for acute care and screening services, as well as prevention, chronic disease management, and wellness programs. The fact that accidents disproportionately affect younger and male community members suggests a community need for education and outreach targeting high-risk behaviors in these groups.

Chronic conditions are responsible for 70% of deaths and 75% of health care spending

Chronic disease increasing

Chronic conditions are responsible for 70 percent of deaths and 75 percent of health care spending nationally, according to the U.S. Centers for Disease Control. These include diabetes, high blood pressure, high cholesterol, heart disease, chronic lower respiratory disease, and obesity. The incidence and prevalence of chronic disease is increasing in DuPage County, and rates for many conditions are above national targets set by Healthy People 2020. Moreover, chronic diseases disproportionately affect minority and low-income populations, which are among the fastest growing in DuPage County.

While the cost and disability burden of chronic diseases are high, they can be significantly reduced through proper management and patient education. Adequate preventive and wellness care, education on the impact of chronic disease, and lifestyle changes that can help control chronic conditions are needed. The rates and distribution of chronic disease within DuPage County also indicate a need for targeted outreach to disproportionately affected groups.

Infectious and sexually transmitted disease rates above targets

Despite the availability of vaccines, pneumonia and seasonal flu are significant causes of hospitalization and death in the United States and DuPage County. Similarly, outbreaks of vaccine-preventable diseases including measles, mumps, and pertussis continue. New threats also appear regularly from emerging infectious diseases. In recent years these have included West Nile Virus, Severe Acute Respiratory Syndrome (SARS), Avian Influenza A, and H1N1 Influenza.

Maintaining high levels of vaccination in the population is the best way to control these diseases. Vaccine rates for pneumonia and flu among older DuPage residents are below national targets. Improving vaccine rates for established diseases requires public outreach and coordination among providers. Meeting emerging disease threats also requires highly coordinated rapid mobilization of public health and provider resources.

While still below national and state levels, rates of sexually transmitted disease have risen in DuPage County in recent years. Education and outreach as well as access to confidential and affordable treatment are needed to address these diseases.

Mental health gaps

Nationally, one in four adults experience a mental health disorder in any given year, according to the National Institute of Mental Health. In 2011 and 2012, 21.6 percent of adults reported symptoms of depression, and the DuPage County Health Department's Mental Health Services unit serves nearly 3,700 adults and 1,750

children for conditions including depression, anxiety, and schizophrenia. Demand for these services has risen in recent years. In addition, the suicide rate in DuPage County has not declined over time, however, the suicide rate of 7.5 deaths per 100,000 population is below the Healthy People 2020 target of 10.2.

Early intervention and ongoing treatment with medication and psychosocial support can be highly effective in improving the function of people with mental disorders and in preventing conditions from worsening. There is significant community need for additional mental health services in DuPage County. In particular, the Mental Health Coalition has identified gaps in services for non-emergent chronic mental illness and mental illness in children. Low-income and unemployed individuals also have limited access to care.

Obesity a growing problem

Obesity is a growing health problem in DuPage County. Rates are rising with over 60 percent of adults countywide either overweight or obese. Of particular concern is the rising rate of obesity among children. For example at one local school, 33 percent of children were found to be overweight or obese. Between 2007 and 2009, 25.2 percent of DuPage County children were overweight, 17.7 percent of which were obese, well above the Healthy People 2020 target of 14.6 percent. And like many chronic health conditions, obesity is more prevalent among lower income and less-educated populations. Obesity increases the risk of many conditions, including diabetes, heart disease, lung disease, stroke and cancer.

Preventing and reducing obesity has the potential to greatly improve public health, reduce healthcare costs and restore economic losses due to disability. Outreach and interventions targeting children and high-risk adult populations are essential to reduce obesity in the community. In addition to medical care, resources to increase exercise, make healthy foods available, and public education are required.

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Access to care

Access to care for low-income and uninsured patients, as well as patients with mental health problems is a growing issue in DuPage County. The number of low-income persons seeking assistance through the DuPage County Health Coalition's Access DuPage program grew 43 percent from 2005 to 2007 while the number of Medicaid enrollees in the county jumped 38 percent from 2006 to 2009. In 2012, 14,402 persons were enrolled in the Access DuPage program at some point in the year.

CDH priority needs identified

At CDH we believe the best way to achieve our community benefit mission is not only to respond directly to the needs identified within our community, but also to partner and coordinate with other groups and individuals with similar health improvement goals. These include local governments, schools, park districts, churches, businesses, nonprofit community groups, and other healthcare providers. Partnering helps generate the best return on our collective resources by helping us all do a better job of identifying and meeting community health needs, and avoiding wasteful duplication of services.

With that philosophy in mind, CDH has identified four priority needs that we believe we are best positioned to address. In particular, we looked for health needs that require a coordinated response across a range of health care and community resources that can benefit from

the integrated nature of our organization, our network providers, and our community partners.

In alignment with the MAPP prioritization model used by DuPage County Health Department and public health agencies throughout the state, we have selected four priority needs which we believe we are best positioned to help address.

COMMUNITY HEALTH PRIORITIES
Access to care
Obesity
Mental health
Chronic disease

Additional information is contained within this report that details our approach to responding to these healthcare needs.

A thank you to our partners

We would like to thank all of our community partners who work together to identify and meet health needs throughout our community. In particular, we thank the DuPage County Health Department and the DuPage County Health Coalition for their generous sharing of statistical data, insight, and technical advice in preparing this report. We would also like to thank the Metropolitan Chicago Healthcare Council and Professional Resource Consultants for their assistance in updating the CHNA materials.

Cadence Health

Overview of our service area and service delivery model

Central DuPage Hospital, part of Cadence Health, is located within DuPage County, and is situated 20 miles west of the metropolitan Chicago area. The County is centrally located within the Northeastern Illinois region and occupies an area of 336 square miles. DuPage County, with its 917,000 plus residents is home to the second largest population (next to Chicago's Cook County) among all counties in the State of Illinois. DuPage County is also home to CDH's primary service area and much of its secondary service area.

The hospital's primary service area includes the communities of: Wheaton, West Chicago, Warrenville, Carol Stream, Glen Ellyn, and Winfield which are located adjacent to our sister hospital, Delnor Hospital. CDH's secondary service area includes: Bartlett, Bloomingdale, Glendale Heights, Hanover Park, Lisle, Lombard, Naperville, Roselle, and Streamwood.

CDH offers a broad array of state-of-the-art key services and relationships including: the CDH Cancer Center, CDH Proton Center – A ProCure Center, Cadence Convenient Care centers, Cadence Physician Group, Cadence Health Foundation, Central DuPage Business Health, CNS Home Health and Hospice, and HealthLab.

Central DuPage Hospital provides 735,965 patient visits annually.*

The Cadence Health network has established partnerships with other health-related organizations to promote wellness in the communities we serve.

THESE PARTNERSHIPS INCLUDE:

- Ann & Robert H. Lurie Children's Hospital of Chicago at Cadence Health
- Charlestowne Medical Office Building
- Community Alliance Home Health
- Rush-Copley Medical Center
- HealthTrack Sports and Wellness
- Wheaton Sports Center

*Inpatient and outpatient combined.

Life Time Fitness

Suburban Surgery Center

Alexian Brothers Medical Center and a Consortium of Physicians

The Center for Surgery partnering with Edward Health Services Corporation and a Consortium of Physicians

In short, our services and relationships with other local healthcare entities embody our belief that our communities are most effectively cared for through like-minded partnerships that provide state of the art, high-quality, evidenced-based care to the residents of DuPage County.

Community benefit process overview

Investing back into the community is a strong part of Cadence Health and who we are. We do not assume lightly the responsibility of caring for our community. Services and relationships are strategically-planned in relationship to need, benefit and outcome. Every dollar earned beyond expenses is rededicated back to serving the residents of DuPage County.

Cadence Health utilizes a 360-process framework and conceptual approach to strategically guide community benefit planning. The process begins with the compilation of a comprehensive community health needs assessment (CHNA), which includes not only a quantitative analysis of secondary data but also reflects input from key community stakeholders and residents. Upon completion of the needs assessment careful consideration is given to the prioritization of needs identified within the study. Prioritization is generally in alignment with local public health expert analysis and consideration is given to addressing needs that we are uniquely suited as a healthcare provider to address – either solely or in collaboration with community partners. Consideration is also given to existing collaboratives to avoid duplication. Three to four health priorities are generally chosen. Our CHNA is conducted every three years and reviewed and updated annually as needed.

The next phase in our community benefit process includes the development of a strategy (Community Benefit Plan) to effectively respond to the needs identified in the CHNA. Goals, objectives, methodology and desired outcomes are developed for each priority initiative. Healthy People 2020 goals and objectives for a healthy nation serve as baseline and the development of targets for desired outcomes in addition to goals established locally by the DuPage County Health Department and other key initiatives. Objectives are operationalized by CDH staff and quantitative and qualitative data is collected throughout the year to measure our progress towards outcomes. This data is reported annually in our Community Benefit Plan Report. At the end of each year, key staff and leadership review the Plan Report assessing the efficacy of our interventions, outcome data and return on investment to ensure maximum use of the dollars committed to our community.

CDH 2013-2015 community health needs assessment

In August 2010, the DuPage County Health Department completed the 2015 IPLAN MAPP planning process. MAPP is a nationally-recognized, community-wide strategic planning tool used for improving public health by helping communities prioritize public health issues, identifying resources for addressing those issues, and taking action. The county progressed through a series of six MAPP phases. Components of the MAPP processes included a Forces of Change Survey, Asset Mapping, Community Themes and Strengths Survey, and a comprehensive Community Health Assessment. This data was gathered utilizing survey methodologies, community meetings, key stakeholder input and secondary analysis of quantitative epidemiologic data. The Health Department used MAPP data to develop its 2015 Community Health Improvement Plan. CDH was pleased to serve on the IPLAN Steering Committee.

In July 2012, CDH commissioned an additional community health assessment through Professional Resource Consultants, Inc. (PRC) in collaboration with the Metropolitan Chicago Healthcare Council (MCHC). In compiling this assessment, PRC spoke directly with 354 area residents conducting a random health survey, as well as convened key community leaders, and consulted existing data sources.

Key findings from both the DuPage County IPLAN and the MCHC PRC report form the basis of our 2013-2015 Community Health Needs Assessment and are discussed below in addition to their implications for the health of community residents within our service area.

Section 1: Demographic and Socioeconomic Indicators

Current population demographics

Demographics by age

Demographics by race/ethnicity

Immigrant population

English literacy

Education

Median household income

Housing

Unemployment

Poverty

Uninsuried and publicly insured

Homelessness

Implications of trends for health services planning

Overview

A population's demographic characteristics are indicative of community health needs. Generally speaking, as age increases, the overall need for health services increases as well. Genetics and culture also influence health needs. Blood pressure, cardiovascular disease, diabetes, cancer, eye disease, and other genetically linked conditions vary significantly among different racial and ethnic groups.

Socioeconomic statistics also affect the volume and type of health needs in the community. These include income, education, English language literacy, employment, insurance, and immigration statuses. In general, lower-income individuals require more assistance in accessing affordable health care. Additionally, individuals with limited English language proficiencies may require interpretation and specialized outreach services.

DuPage County has seen vast modification in its demographic and socioeconomic trends in the past two decades.

THESE TRENDS INCLUDE:

RISING AGE

By 2030 the number of DuPage residents age 60 or over will have increased 133 percent from 2000, according to estimates by the U.S. Census Bureau. This will drive community need for a range of acute care services including heart and vascular failure, stroke, and cancer care. The need for resources to manage the chronic conditions more commonly found in older populations, and to promote healthy lifestyles, will also increase.

INCREASED ETHNIC DIVERSITY

The minority population increased in virtually every age group within DuPage County, especially Hispanics, which now comprise 12.6 percent of the population. Additionally, the Asian population has increased by 270 percent from its 2000 population (72,628). The CDH service area is more homogeneous in terms of race and ethnicity than the county as a whole, with White non-Hispanics making up 69.8 percent of the population, Hispanics 13.6 percent and Asians and African-Americans each comprising 15.5 percent of the population.

INCREASED LOW-INCOME, UNEMPLOYED AND UNINSURED

Despite the fact that DuPage County has a median household income of more than $72,470, 2012 PRC Health Rankings report the unemployment rate in DuPage County was 8.3 percent. From 2007 to 2011, poverty rates in the county increased to 6.2 percent. The economic downturn has accelerated this trend and has sharply raised the number of unemployed and uninsured residents. Resources, planning, and coordination among providers, community groups, and government will be required to ensure access to affordable care for this growing low-income population.

1.1 Current population demographics

The population in 2010 was 917,000, with a population density of about 336 people per square mile, according to DuPage Statistical Profile. In 2010, the population breakdown was estimated to be 646,130 Caucasians, 41,024 African-Americans, 91,793 Asians, and 121,506 Hispanic or Latino origin.

1.2 Demographics by age

DuPage County is the overall seventh youngest county in Illinois, and it is notable for its age distribution. From 2000 to 2010, the population increased by 1.4 percent, and the age distribution shifted rapidly. The median age in DuPage County is 38.2 years. The largest age group is the 18 to 44 year-olds, but the fastest growing segment of the population is 45 to 64 year-olds.

Population Changes in DuPage County 2000 – 2010

AGE GROUP	2000-2010 % OF CHANGE
0-19	-6.0%
20-44	-12.7%
45-64	27.3%
65+	19.8%
Total	1.4%

Source: DuPage County Health Department

AGE GROUP	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
0-19	263,681	265,638	265,521	264,524	264,286	262,471	260,317	258,646	257,119	255,730	250,564
20-44	345,686	343,548	340,669	335,675	331,684	325,149	319,917	314,910	311,851	308,936	297,698
45-64	206,000	214,619	221,481	227,680	233,518	240,262	245,814	250,748	255,852	261,816	262,264
65+	88,794	90,423	91,193	92,578	93,474	94,707	96,142	98,644	102,560	106,059	106,398
Total	**904,161**	**914,228**	**918,864**	**920,457**	**922,962**	**922,589**	**922,190**	**922,948**	**927,382**	**932,541**	**916,924**

Source: DuPage County Health Department

1.3 Demographics by race/ethnicity

The racial distribution in DuPage County has changed significantly from 2000 to 2010. Non-Hispanic Whites now constitute 70.5 percent of the total population, a drop from 79 percent in 2000, while Hispanics now comprise 13.3 percent of the total population, an increase from 9 percent in 2000.

Racial/Ethnic Make-up in DuPage County

	2000		2010	
	Number	Percent	Number	Percent
Not Hispanic or Latino	822,795	91.0%	795,418	86.7%
White alone	711,966	78.7%	646,130	70.5%
Black or African American alone	26,977	3.0%	41,024	4.5%
Asian alone	70,908	7.8%	91,793	10.0%
American Indian and Alaskan Native alone	912	0.1%	992	0.1%
Native Hawaiian and other Pacific Islander alone	180	0.0%	171	0.0%
Some other race alone	870	0.1%	1,181	0.1%
Two or more races	10,982	1.2%	14,127	1.5%
Spanish, Hispanic or Latino				
Spanish, Hispanic or Latino (of any race)	81,366	9.0%	121,506	13.3%
Mexican	63,135	7.0%	96,039	10.5%
Puerto Rican	4,752	0.5%	7,736	0.8%
Cuban	1,834	0.2%	2,345	0.3%
Other Spanish, Hispanic or Latino	11,645	1.3%	15,386	1.7%
Total minority population	**192,195**	**21.3%**	**270,794**	**29.5%**

Source: United States Census Bureau

1.4 Immigrant population

Between 2000 and 2009, the foreign-born population of DuPage County increased from 15.3 percent in 2000 to 18.4 percent in 2009. Currently, the foreign-born population constitutes 18.3 percent of the total DuPage County population with 82,391 foreign-born residents.

Residents Born Outside the United States

DuPage County Foreign Born Population (as Percent of Total population)		
	2000	2009
Percent foreign born	15.3%	18.4%
2009 Region of Birth of Foreign Born as Percent of Total Foreign Born Population		
Europe	26.7%	
Asia	39.9%	
Africa	2.3%	
Oceania	0.1%	
Latin America	30.1%	
Northern America	0.9%	

Source: DuPage County 2011 Statistical Profile

1.5 English literacy

From 1990 to 2007, the percentage of the DuPage population speaking a language other than English at home grew from 13 percent to 26.1 percent. Within the foreign-born population the proportion speaking a language other than English at home was 89.4 percent in 2007. In 2012, there were 10.1 percent (86,551 people) over the age of five years reporting that they spoke English less than "very well." According to County Health Rankings, 10.1 percent of the population in DuPage County is not proficient in English, while 6.6 percent of the population is illiterate.

Language Spoken at Home (2007-2012)

	DuPage		Illinois	
Language other than English spoken at home, percent age 5+, 2007 - 2011	26.1%		22.0%	
Not proficient in English	2011		2012	
	Number	Percent	Number	Percent
DuPage County	85,691	9.9%	86,551	10.1%
Illinois State		10%		10%

Source: County Health Rankings

1.6 Education

In 2012, the percent of the population in DuPage County with a high school degree decreased by 8 percent (92 percent) from 100 percent from 2011. Conversely, the percent of the population with a college, graduate, or professional degree increased by 45.6 percent. In DuPage County, 8 percent of residents age 25 and over have not graduated high school.

Educational Attainment in DuPage County

	DuPage			Illinois		
	2010	2011	2012	2010	2011	2012
High school graduate	92%	100%	92%	80%	80%	84%
Some college	44%	75%	76%	29%	64%	65%

Source: United States Census Bureau

1.7 Median household income

The 2012 median household income for DuPage County was $72,470. In 2009, DuPage County's per capita personal income was 125 percent of the Illinois average, and 132 percent of the national average, and DuPage County's 2009 median household income was $73,520.

1.8 Housing

The number of households paying more than 19.3 percent of their income for rent, which is commonly defined as the threshold of affordability for middle-income groups, has increased sharply. The Illinois Poverty Report stated that 23.2 percent of DuPage County were renter households. The homeownership rate (2005 to 2009) is at 76.8 percent.

1.9 Unemployment

Historically, the DuPage County unemployment rate has run below the state and national levels. With 517,675 people unemployed in 2011, the unemployment rate was 8 percent, less than Illinois' 9.8 percent, and the national rate of 8.9 percent.

Unemployment in DuPage County 2006-2011

Year	Labor Force	Total Employed	Number Unemployed	Unemployed Rate	IL Unemployed Rate	US Unemployed Rate
2006	534,033	517,965	16,068	3.0	4.6	4.6
2007	538,383	518,110	20,273	3.8	5.1	4.6
2008	534,068	507,368	26,700	5.0	6.5	5.8
2009	523,493	479,539	43,954	8.4	9.9	9.3
2010	524,521	481,005	43,516	8.3	10.3	9.6
2011	517,675	476,382	41,293	8.0	9.8	8.9

Source: DuPage County Health Department

1.10 Poverty

Although DuPage County has one of the highest median incomes in the state, the number of low-income residents is steadily increasing. In 2011, the poverty rate in DuPage County was 6.2 percent which is less than the Illinois rate of 13.1 percent. The 2010 American Community Survey reported the number of children in poverty is 17,995 or 8 percent of the population that were less than 18 years of age.

Percent of Families and People with Income in the Past 12 Months Below Poverty Level

Under 18 years of age	8.1%
18 to 64	5.7%
65 years and older	4.9%
All families	4.4%
w/related children under 18 years	6.6%
w/related children under 5 years	5.6%
Married couples w/families	2.5%
w/related children under 18 years	3.3%
w/related children under 5 years	2.7%

Source: American Community Survey

1.11 Uninsured and publicly insured

The percentage of the DuPage County population without health insurance continues to be lower than the state and nation. The percentage of residents in DuPage County without health insurance coverage was 13 percent in 2012, compared to 13 percent in 2011, which is lower than the Illinois rate of 17 percent.

1.12 Homelessness

In 2011, 1,460 people in DuPage County were homeless and stayed in a shelter. The number of individuals using the shelter system decreased by 2 percent, from 1,486 people to 1,460; however, this does not necessarily reflect a decrease in demand. Funding cuts caused a decrease in the number of available beds for domestic violence services, limiting the number of individuals served. During the same two-year period, the number of families using the shelter system increased slightly (2 percent) from 203 to 258. Single men comprised the largest number of shelter users, accounting for 639 or 44 percent of the shelter population. The number of women using shelters decreased from 520 to 330; this can in part be attributed to the decrease in the number of available beds for domestic violence survivors. Children are the fastest growing homeless group in the United States. In DuPage County, children represent 19 percent of the homeless who stayed in a shelter

1.13 Implications of demographic and socioeconomic trends for health services planning

The trends in demographic and socioeconomic characteristics documented will significantly expand and transform community health needs in DuPage County in the coming years. A wide range of sponsors - healthcare and human services providers, community groups, government agencies, and individual community members - will be required to meet these emerging needs.

The rapid aging of the population will bring with it increased rates of chronic conditions and diseases. These include obesity, diabetes, arthritis, heart disease, cancer, and degenerative neurological conditions. In addition, acute conditions including heart attack, pneumonia, and stroke will increase. This will create a need for a range of services from wellness and prevention to management of chronic conditions to acute care. More professionals, from home health aides, social workers, dietitians, and nurses to advanced practice nurses, primary care physicians, and skilled specialists, will be needed to provide these services.

The growing diversity of the population will bring with it a need for greater diversity in the healthcare workforce and inclusive approaches to delivering services that are sensitive to cultural needs. In particular, more resources will be needed to serve foreign-born populations that may not speak English and have different health and wellness traditions. Specialized outreach and face-to-face interpretation services will be needed to effectively inform and communicate with these individuals.

Higher rates of unemployment, lack of insurance, poverty, and homelessness will create a greater need for access to affordable healthcare services. Social services will also be needed to mitigate the impact of low income on community and individual health. Without a county hospital dedicated to meeting the needs of this growing underprivileged population, private providers, community clinics, government agencies, and community groups will need to develop additional capacity to serve this population. Medical homes and similar arrangements that emphasize prevention, early detection, and management of chronic conditions will be needed. Significant planning and coordination of services will be required to obtain the maximum positive impact on community health status for resources invested.

Reference links

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Section 2: Maternal and Child Health

Overall infant mortality rate below target

Infant mortality higher among African-Americans

Younger women access prenatal care less often

Implication of maternal child health data

2.1 Overall infant mortality rate below target

Between 2007 and 2009, infant mortality has decreased to 5.2 deaths per 1,000 births, satisfying the Healthy People 2020 target of 6.0 per 1,000. Outreach and improved access to prenatal care through medical homes or similar primary care models will help to ensure that infant mortality stays below the target.

2.2 Infant mortality higher among African-Americans

Though sample sizes are small and rates fluctuate, African-American infant mortality consistently runs three to four times higher than the Caucasian rate. Research and interventions targeting this population may be warranted.

2.3 Younger women access prenatal care less often

Between 2007 and 2009, only 13.1 percent of all DuPage County births did not receive prenatal care in the first trimester of pregnancy, well below regional percentages, Illinois proportion, and the Healthy People 2020 target of 22.1 percent or lower. In this time period, 4.3 percent of DuPage County births were to women under the age of 20.

2.4 Implication of maternal child health data

The health of mothers and infants is of critical importance to the overall growth and health of our community. Not only is it a reflection of the current health status of a large segment of the population, it is also a predictor of the next generation's health.

Section 3: Adult Morbidity and Mortality: Leading Causes of Death and Years of Potential Life Lost

Cancer, heart disease and stroke are the leading causes of death

Crude mortality rate

Leading causes of death

Leading causes of death by gender

Leading causes of death by age

Years of potential life lost

Implications for health services planning

Cause of death and years of potential life lost are important measures that highlight the health needs in the community. The absolute number of deaths spotlights the most serious medical conditions in the community overall, while years of potential life lost helps identify causes of possibly avoidable deaths. Examination of cause of death and years of potential life lost data in DuPage County reveals:

3.1 Cancer, heart disease, and stroke are the leading causes of death

Together they accounted for over half of DuPage County's 5,632 deaths in 2012. Heart disease is the number one killer of women and cancer of men. Cancer is the number one cause of years of potential life lost. Wellness, screening, prevention, acute intervention, and management of chronic conditions and risks are required to address these community conditions.

Factors Contributing to Premature Death

Physical environment	5%
Medical care	10%
Social circumstances	15%
Genetics	30%
Lifestyle behaviors*	40%
*Tobacco	18%
*Diet/Inactivity	17%
*Alcohol	4%
*Infectious disease	3%
*Toxic agents	2%
*Motor vehicle	2%
*Firearms	1%
*Sexual behavior	1%
*Illicit drugs	1%
*Other	5.2%

Source: Professional Research Consultants

Details of cause of death and years of potential life lost and implications for planning follow.

3.2 Crude mortality rate

During a six-year period from 2000 to 2006, DuPage County's mortality rates remained relatively stable with a crude death rate ranging between 586 to 620 deaths per 100,000 people while the Illinois rate ranged between 796 and 856.

3.3 Leading causes of death

In 2009, there were 4,064 deaths in DuPage County. The top three leading causes of death were cancer, heart disease, and stroke. Cancer accounted for 26.3 percent of deaths, heart disease accounted for 22.6 percent, and cerebrovascular disease, such as stroke, accounted for 5.4 percent of deaths in DuPage County. All rates are relatively close to the Healthy People 2020 targets.

Leading Causes of Death in DuPage County (2009)

	Number	%
All causes	5632	100.0%
Diseases of the heart	1275	22.6%
Cancer (malignant neoplasms)	1482	26.3%
Cerebrovascular disease	306	5.4%
Chronic lower respiratory disease	290	5.1%
Unintentional injuries (accidents)	174	3.1%
Alzheimer's disease	218	3.9%
Pneumonia	121	2.1%
Diabetes mellitus	98	1.7%
Nephritis and nephrosis	162	2.9%
Septicemia	85	1.5%

Source: DuPage County Health Department

3.4 Leading causes of death by gender

While the top ten leading causes of death were the same for both males and females in 2009, the ranking varied by gender. The first and second causes of death for males and females are cancer, followed by heart disease. Additionally, the number of female deaths related to cancers and cerebrovascular disease were 24.6 percent and 21 percent higher respectively. Accidents (defined as unintentional injuries) were the third leading cause of death for males and the eighth for females, 2.8 percent higher in males. This was attributed to the higher number of male motor vehicle deaths. This discrepancy reflects state and national trends.

DuPage County Leading Causes of Death, all ages by gender (2009)

	Male	Female
Cancer	28.2%	24.6%
Heart disease	24.5%	21.0%
Unintentional injuries (accident)	4.6%	1.8%
CLRD	4.3%	5.9%
Stroke	4.1%	6.6%
Kidney disease	3.4%	2.4%
Alzheimers disease	2.3%	5.3%
Influenza/pneumonia	2.1%	2.3%
Diabetes	1.9%	1.6%
Septicemia	1.3%	1.7%

Source: DuPage County Health Department

3.5 Leading causes of death by age

In general, youth were more vulnerable to violent death, while middle age individuals were more vulnerable to disease conditions affecting individuals with chronic diseases including cancer, hypertension, and diabetes. Seniors were more vulnerable to disease related to general disability including, infection, dementia, chronic disease, and accidental falls. Accidents were the leading cause of death for all age groups from 1 to 44 years of age, cancer the leading cause for 45 to 64 years, and heart disease the leading cause for those age 65 and above.

3.6 Years of potential life lost

The impact of premature death can be measured by years of potential life lost (YPLL). Years of potential life lost is an indicator that identifies preventable causes of death. In non-infant residents of DuPage County, accidents and suicides accounted for 14,751 years of potential life lost in 2009.

Leading Causes of Death and Years of Potential Life Lost (2009)

2009 YPLL Before Age 75	DuPage County			Illinois			US		
Cause of Death	Deaths	YPLL	YPLL%	Deaths	YPLL	YPLL %	Deaths	YPLL	YPLL %
All causes	5,632	152,204	100%	42,905	810,800	100%	1,076,003	20,261,405	100%
Cancer	1,482	57,291	37.6%	13,455	185,796	22.9%	318,450	4,397,332	21.7%
Diseases of the heart	1,275	28,981	19.0%	8,971	133,449	16.5%	210,000	3,038,728	15.0%
Unintentional injury (accidents)	174	9,983	6.6%	2,976	100,788	12.4%	87,805	2,928,868	14.5%
Cerebrovascular	306	4,917	3.2%	1,414	19,205	2.4%	37,178	518,952	2.6%
Suicide	68	4,768	3.1%	1,078	34,798	4.3%	33,956	1,063,300	5.2%
Chronic low respiratory disease	290	4,172	2.7%	1,867	21,147	2.6%	51,567	543,247	2.7%
Diabetes mellitus	98	2,608	1.7%	1,314	18,658	2.3%	34,546	494,484	2.4%
Perinatal period	29	2,161	1.4%	647	48,459	6.0%	13,114	982,263	4.8%
Congenital anomalies	22	1,565	1.0%	390	23,780	2.9%	9,273	548,362	2.7%
Homicide	19	1,267	0.8%	865	39,978	4.9%	16,398	702,725	3.5%
All others	1,869	34,491	22.7%	9,928	184,742	22.8%	263,716	5,043,144	24.9%

Source: DuPage County Health Department

3.7 Implications of leading causes of death and years of potential life lost for health services planning

An aging population and the prevalence of cancer, heart disease, and stroke as leading causes of death in DuPage County suggest a growing need for screening and acute care services. Prevention, chronic disease management, and wellness services are also needed to reduce the financial and disability impact of these conditions. Higher cancer mortality rates among men and women suggest that targeted outreach may be useful.

The fact that accidents disproportionately affect younger and male community members suggests a need for education and outreach targeting high-risk behaviors in these groups.

Citations

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Section 4: Chronic Conditions and Diseases

Rates of many chronic conditions are rising

Chronic conditions contribute to leading causes of death

Chronic disease is a leading cause of disability and lost income

Chronic disease disproportionately affects low-income and minority populations

Perception of physical health

Hypertension

Hypercholesterolemia

Obesity

Diabetes

Arthritis

Osteoporosis

Asthma

Chronic lower respiratory disease

Heart disease

Stroke

Cancer

Implications for health services planning

Overview

Chronic conditions are responsible for 70 percent of deaths and 75 percent of healthcare spending nationally, according to the CDC. These include diabetes, high blood pressure, high cholesterol, heart disease, chronic lower respiratory disease, and obesity. Moreover, chronic diseases disproportionately affect minority and low-income populations, which are among the fastest growing populations in DuPage County. Examination of chronic disease data in DuPage County reveals:

4.1 Rates of many chronic conditions are rising

In recent years, high blood pressure, high cholesterol, obesity, and diabetes have become more common. These conditions constitute diseases themselves and increase risk for other chronic and acute conditions. Education, screening, and management can help control these conditions, which are often lifestyle and diet related.

4.2 Chronic conditions contribute to leading causes of death

High blood pressure is present in most heart disease, which is a leading cause of death in DuPage County and nationally. Obesity, cholesterol, and high blood pressure also contribute to cancer, another leading cause of death, and cerebrovascular disease, the third leading cause of death. Managing and treating these conditions requires a range of resources from education and screening to high-acuity inpatient care.

4.3 Chronic disease is a leading cause of disability and lost income

Arthritis, chronic lower respiratory conditions, and stroke are leading causes of limitations of daily activity and productivity losses due to inability to work. Prevention, disease management, and social services may help mitigate the impact of these conditions.

4.4 Chronic disease disproportionately affects low-income and minority populations

Lack of access to primary care, inadequate nutrition, higher rates of smoking and alcohol consumption, and genetic predispositions are all factors that contribute to chronic disease. Targeted outreach, education, lifestyle improvement programs, and access to regular preventive, screening, and medical management services may reduce these disparities.

4.5 Perception of physical health

PRC data obtained from a random survey of 354 respondents residing within the CDH service area found that 11.1 percent of respondents perceived themselves to be in fair/poor physical health as compared to the US rate of 16.8 percent.

4.6 Hypertension

Individuals with uncontrolled hypertension or high blood pressure are more likely to have heart attacks or strokes than those with normal blood pressure.

In 2012, 27 percent of DuPage County adults indicated that they have been told they have high blood pressure - a 4.3 percent increase from 2009. Of these individuals, 88.9 percent indicated that they were either taking medication, changing their diet, or exercising in order to lower their blood pressure. DuPage County's 27 percent registers below the United States percentage of 34.3.

Using a 3-year average of hospitalizations from 2005 to 2007, the DuPage County Illinois Project for Local Assessment of Need (IPLAN) committee found that the majority (approximately 64.6 percent) of hospitalizations for heart disease occurred in residents age 65 and older. However, in heart cases with hypertension, the data showed that hospitalizations began at a much younger age and continued to increase until peaking at age 75 years and older.

4.7 Hypercholesterolemia

In 2012, 29.2 percent of DuPage County adults indicated that they have been told they have high blood cholesterol - an 8 percent decrease from 2009. Cholesterol is a substance normally produced by the liver but is also consumed in foods. When consumed in excess or not adequately metabolized, cholesterol levels build in the body, leading to diseases of the heart including coronary artery disease, heart attack, and stroke. Of 29.2 percent of adults who had been told they had high blood cholesterol, 89.1 percent indicated that they were either taking medication, changing their diet, or exercising in order to lower their cholesterol levels.

4.8 Obesity

In 2012, 24.7 percent of DuPage County adults were obese or morbidly obese, as defined by a Body Mass Index (BMI) of 30 or more. This is a 4.9 percent decrease from 2009's 29.6 percent, both figures being below the Healthy People 2020 target of 30.6 or lower.

In 2012, low-income individuals had the highest rate of obesity at 36.7 percent, while non-white individuals had an obesity rate of 33 percent.

Studies have shown that lifestyle adjustments such as physical activity and dietary changes can help reduce obesity, prevent high blood pressure, and reduce blood cholesterol.

4.9 Diabetes

Diabetes mellitus, like many chronic diseases, may be the result of behavioral risk factors, such as poor diet and being overweight or obese.

Following national trends, the prevalence of diabetes has increased over time in DuPage County, rising from 3.0 percent in 2002 to 12.1 percent in 2009. However, by 2012 diabetes rates in DuPage County decreased to 10 percent.

Over the past decade, diabetes has remained the seventh leading cause of death in the United States and the eighth leading cause of death in DuPage County. In DuPage County in 2006, the rate of diabetes was 14.3 deaths per 100,000 population, which has decreased between 2007 and 2009 to a mean of 11.5 deaths per 100,000 population. However, this number may be misleading as diabetes is likely to be underreported as a cause of death. Studies have found that only 35 to 40 percent of descendants with diabetes have the disease listed anywhere on the death certificate. About 10 to 15 percent have it listed as the underlying cause of death, though it commonly contributes to death from many other causes. The risk of death for an individual with diabetes is twice that of someone of the same age without the disease.

Percent of DuPage County Diagnosed with Diabetes (2002 – 2012)

Year	Percentage
2002	3.0%
2006	4.5%
2008	8.4%
2009	12.1%
2012	10.0%

Source: Professional Research Consultants

Prevalence of Diabetes in DuPage County per Age and Sex (2012)

Men	13.5%
Women	6.7%
Age 18-39	1.5%
Age 40-64	11.2%
65+	33.1%
Low Income	19.2%
Mid/high Income	7.8%
White	8.3%
Non-white	13.9%
Reside in CDH Service Area	10.0

Source: Professional Research Consultants

4.10 Arthritis

In 2008, 20.8 percent of the DuPage County adult population had been diagnosed with arthritis by a health professional. Moreover, 26.9 percent of the adult population had activities that were limited by joint symptoms. These figures are similar to national statistics in which 20 percent of adults had been told that they had some form of arthritis in 2007, and 24 percent of adults had chronic joint symptoms. Arthritis is the most common cause of disability in the United States.

4.11 Osteoporosis

Of the estimated 10 million Americans who have osteoporosis, 80 percent are females. Besides being female, other risk factors for osteoporosis include old age, family history of the disease, low levels of sex hormones, diet, inactive lifestyles, and smoking. Osteoporosis increases the likelihood of fractures and is associated with high levels of disability and mortality in older populations. While osteoporosis is often thought to impact older individuals, 85 to 90 percent of bone mass is acquired by age 18 for girls and 20 for boys. Therefore, the building of strong bones during childhood and adolescence is important for prevention of osteoporosis. With early diagnosis and aggressive treatment, bone loss may be stopped and in many cases reversed, thus lessening the chances of falls and fractures.

4.12 Asthma

Asthma is a disorder that causes the airways of the lungs to swell and narrow, leading to wheezing, shortness of breath, chest tightness, and coughing. Asthma affects people of all ages, but it most often starts during childhood. In the United States, more than 22 million people are known to have asthma. Nearly 6 million of these people are children. Among children, asthma is a leading cause of hospital stays and school absences. In DuPage County in 2009, the total crude rate of asthma deaths per 100,000 was approximately 0.76.

As with other chronic conditions, quality outcomes rely not only on the availability of proper treatment, but also on the proper use of medication, and careful self-management by the patient. Patients with asthma need to avoid triggers such as extreme stress, tobacco smoke, allergens, and environmental toxins.

4.13 Chronic Lower Respiratory Disease (CLRD)

From 2007 to 2009, there was an average of 34.7 deaths per 100,000 population from CLRD in DuPage County.

Chronic Lower Respiratory Disease, formerly known as COPD, is a progressive disease and the fourth leading cause of death in the United States. The symptoms of CLRD typically worsen over time, especially if there is continued exposure to cigarette smoke or other environmental hazards. A person with CLRD is more susceptible to infections, which can damage lungs and airways.

Each year, there is an average of 67,800 CLRD hospitalizations in Illinois. In 2009, the total hospitalization charges for CLRD in Illinois, excluding professional fees, was more than $1.1 billion. Of the $1.1 billion in charges, 80 percent were to Medicare or Medicaid, which makes it a taxpayer issue. CLRD affects middle-age men and women, and 2007 was the first year that more females were hospitalized due to CLRD than males in Illinois, at a rate of 14.45 females per 100,000 population versus 14.38 for males. The trend continued during 2008 and 2009.

4.14 Heart disease

Heart disease is the second leading cause of death in DuPage County, behind cancer. Heart disease accounted for 22.6 percent of DuPage County deaths in 2012. The rate of heart disease has risen in the past few years. In 2006, heart disease accounted for 103 deaths per 100,000 population in DuPage County. Between 2007 and 2009, this rate increased to 151.6 deaths per 100,000 population, staying just below the Healthy People 2020 target of 152.7.

4.15 Stroke

Stroke is the third leading cause of death in the United States and DuPage County, accounting for 5.4 percent of all DuPage County deaths. Between 2007 and 2009, there were 36.9 deaths per 100,000 population in DuPage County, lower than 2006's 37.2 deaths, but still above the Healthy People 2020 target of 33.8. The majority of hospitalizations for stroke, 69.6 percent, were residents aged 65 and older.

4.16 Cancer

Cancer is the leading cause of death in DuPage County and the second leading cause of death in the United States. One third of all cancer deaths are related to overweight or obesity, physical inactivity and poor nutrition, and consequently may be prevented. Moreover, the American Cancer Society reports that at least half of all new cancer cases could be prevented or detected earlier through screening. Advances in cancer care are also extending survival rates, increasingly transforming cancer into a chronic condition to be managed over years and decades, primarily on an outpatient basis.

DuPage County Percent of Total Cancer Deaths (2009)

	2009 Deaths	Percent	2009 Est. Population	Mortality Rate*
Total cancer	1,482	100.0%	912,732	162.4
Lung	384	25.9%	912,732	42.1
Colorectal	116	7.8%	912,732	12.7
Breast	114	7.7%	912,732	12.5
Breast female	113	7.6%	465,299	24.3
Prostate	79	5.3%	447,433	17.7
Cervical	6	0.4%	465,299	1.3

**Per 100,000 population*

Source: Illinois Department of Public Health

Between 2007 and 2009 in DuPage County, there was an annual average of 162.3 deaths per 100,000 population, below Illinois' current average of 183.9. In 2012, 2.3 percent of surveyed Central DuPage Hospital Service Area adults had been diagnosed with skin cancer and 3.6 percent with non-skin cancer, similar to 2009 survey findings.

4.16.1 Lung cancer

The most common type of cancer in DuPage County was lung cancer. In 2009, the DuPage County lung cancer mortality rate was 42.1 deaths per 100,000 population. Since 1991, lung cancer incidence among women has decreased, though rates among males remain higher.

DuPage County Lung Cancer Rates by Gender (2009)

Years	Male Rate*	Female Rate*
91-95	86	46.1
92-96	88.8	48.2
93-97	87.9	46.8
94-98	86.4	47.8
95-99	85.8	49.9
96-00	81.9	50.9
97-01	81.3	50.8
98-02	79.2	52.3
99-03	76.5	52.9
00-04	74.5	52
01-05	75.1	52.2
02-06	72.6	51.9

*Rate per 100,000 population

Source: DuPage County Health Department

4.16.2 Colorectal cancer

The third most commonly diagnosed cancer among men and women is colorectal cancer. In 2009, DuPage County's rate of 12.7 deaths per 100,000 population was less than Illinois' rate of 19.5.

4.16.3 Breast cancer

Breast cancer is the most common type of cancer among women and accounts for one of four cancer diagnoses in women in the United States. In DuPage County, the 2009 breast cancer mortality rate was 24.3 deaths per 100,000 population and remains among Illinois' highest rates in 2012.

Mammography is the single most effective method for early detection of breast cancer. According to 2008 Behavioral Risk Factor Surveillance System (BRFSS) data, 76 percent of women over 40 years old nationwide had a mammogram within the last two years, as have 75.8 percent of women from this same population in Illinois. Approximately 81.9 percent of DuPage County women aged 40 and over had a mammogram within the past two years in 2008.

4.16.4 Prostate cancer

Prostate cancer is the most commonly diagnosed cancer among men and is the second leading cause of male cancer death. In 2009, there were 79 prostate cancer deaths in DuPage County for a rate of 17.7 deaths per 100,000 males (IDPH VSS, 2009).

4.16.5 Cervical cancer

In Illinois in 2009, the cervical cancer mortality rate was 1.3 deaths per 100,000 females. For DuPage County, there were seven cervical cancer deaths in 2005, and six in 2006, and six in 2009. Cervical cancer represents less than one percent of all cancer deaths, and DuPage County's rate is 0.4% cervical cancer deaths per 100,000 females.

Once the most common cause of cancer deaths in women, cervical cancer mortality rates declined by 74 percent from 1955 to 1992 and continues to decline by nearly four percent each year. The main reason for the drop was the increased use of the Papanicolaou (Pap) test, which can detect changes in the cervix before cancer develops, or can discover cancer in its earliest, most curable stage. In 2008, approximately 93 percent of DuPage County adult women had received a Pap test, and 88.4 percent of women over 18 years old had a Pap test within the previous three years.

4.17 Implications for health services planning

Chronic disease has a major impact on community health status and individual quality of life. It also greatly increases the direct cost of health care services and indirect costs of lost income due to disability. Seven of ten deaths in the U.S. are related to chronic disease, and in 2005, 133 million Americans - about half of the adult population - had at least one chronic illness. About one fourth of these had one or more daily activity limitations as a result of chronic disease disability. As the population of DuPage County ages, rates of chronic disease will go up. DuPage County is the overall seventh youngest county in Illinois, and it is notable for its age distribution. From 2000 to 2010, the population increased by 1.4 percent and the age distribution shifted rapidly. The median age in DuPage County is 38.2 years old. The largest age group is the 18 to 44 year-olds, but the fastest growing segment of the population is 45 to 64 year-olds.

Although chronic diseases are among the most common and costly of all health problems, they are also subject to prevention and remediation. The Center for Disease Control (CDC) stresses that for chronic disease prevention to be most effective, it must occur across the lifespan and consist of activities that include health promotion, early detection efforts, and management of existing diseases and related complications.

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Section 5: Infectious and Sexually Transmitted Diseases

Vaccine-preventable diseases remain prevalent

Emerging diseases are a threat

Sexually transmitted diseases are increasing

Implications for health services planning

5.1 Vaccine-preventable diseases remain prevalent

More than 100 cases of chickenpox and chronic hepatitis B are reported annually in DuPage County, suggesting a need for increased vaccination coverage. Pertussis, mumps, and measles also break out periodically. In addition, pneumonia and influenza vaccination rates for those over age 65 in DuPage County are well below national rates and continue to decline.

5.2 Emerging diseases are a threat

In 2009, the H1N1 flu virus resulted in hundreds of hospitalizations and four deaths in DuPage County, indicating an ongoing need to guard against new infectious diseases.

5.3 Sexually transmitted diseases are increasing

While still below state and national levels, rates of sexually transmitted disease have risen in DuPage County in recent years. Education and outreach as well as access to confidential and affordable treatment are needed to address these diseases.

5.4 Implications for health services planning

Despite being vaccine-preventable diseases, pneumonia, measles, mumps, pertussis, and seasonal flu are significant causes of hospitalization and death in the United States and DuPage County. Recent years have brought other threats including West Niles virus, severe acute respiratory syndrome (SARS), avian influenza A, and H1N1 influenza.

Section 6: Mental Health

Depression is prevalent

Demand for services is rising and supply is not adequate

Suicide rate has not declined over time

Implications for health services planning

According to the National Institute of Mental Health, one in four adults nationwide experiences a mental health disorder in any given year. Examination of mental health data in DuPage County reveals:

6.1 Depression is prevalent

In 2008, 27.5 percent of DuPage County adults reported symptoms of depression, with nearly five percent reporting it interfered with activities.

6.2 Demand for services is rising and supply is not adequate

In 2008 the DuPage County Health Department's Mental Health Services unit served nearly 3,700 adults and 1,750 children for severe conditions including depression, anxiety, and schizophrenia. Demand for these services, as well as support for less severe ongoing conditions, has risen in recent years and gaps exist. Services are in particularly short supply for children, psychotherapy for chronically mentally ill patients, and ambulatory care for publicly insured patients.

6.3 Suicide rate has not declined over time

The suicide rate in DuPage County has not declined over time. However, DuPage County's 2012 suicide rate of 7.5 deaths per 100,000 population is below both Illinois and national rates, as well as the Healthy People 2020 target of 10.2.

6.4 Implications for health services planning

Responding to the emotional needs of an individual is equally as important as responding to their physical needs. In the PRC study, 21.6 percent of individuals surveyed in CDH's primary service area described themselves as suffering from chronic depression. Individuals affected by mental health disorders have a poorer quality of life and the direct and indirect economic burden of acute care is far greater than responding preventively to these individuals.

Section 7: Nutrition, Physical Activity and Obesity

Obesity rates are rising

Obesity rates vary with income and education

Poor nutrition and limited physical activity are factors

Implications for health services planning

7.1 Obesity rates are rising

As of 2012, the obesity rates in DuPage County have decreased from over 25 percent of adults to 24.7 percent. Rates among children are also high, with 25.2 percent of children overweight. 17.7 percent are obese. In the PRC needs assessment survey, 60.9 percent of respondents described themselves as overweight and 24.5 percent as obese. On a positive note, 44.8 percent of respondents described consuming 5+ servings of fruit or vegetables per day.

7.2 Obesity rates vary with income and education

Lower income and less educated populations have higher rates of obesity. Targeted outreach may help alleviate this condition.

7.3 Poor nutrition and limited physical activity are factors

Increased caloric intake, less walking, and more time in front of televisions and computer screens contribute. Lack of access to fresh fruits and vegetables and other nutritionally dense foods may be a problem for lower income residents.

7.4 Implications for health services planning

Obesity is a growing health problem in DuPage County. Obesity increases the risk of everything from diabetes to heart disease, lung disease, stroke, and cancer. Preventing and reducing its prevalence would greatly improve public health, reduce health care costs, and restore economic losses to disability.

Section 8: Access to Care

Growing numbers of uninsured, unemployed and low-income residents

Disproportionate access problems among minorities and non-English speakers

Fragmented mental health services

PRC survey results

Implications for health services planning

8.1 Growing numbers of uninsured, unemployed, and low-income residents

The number of low-income persons seeking assistance through the DuPage County Health Coalition's Access DuPage program grew 43 percent from 2005 to 2007, while the number of Medicaid enrollees in the county jumped 38 percent from 2006 to 2009. Unemployment rose from about 4.5 percent at the beginning of 2008 to more than 9 percent at the end of 2009. With 517,675 people unemployed in 2011, the unemployment rate was 8 percent.

8.2 Disproportionate access problems among minorities and non-English speakers

Hispanic and people speaking Spanish as a primary language make up more than half of the population served by Access DuPage and Medicaid.

8.3 Fragmented mental health services

While services exist for treating acute mental health episodes, access to counseling and psychiatric drugs on an outpatient basis is limited.

8.4 PRC survey results

Additional survey data obtained from the PRC survey noted 11.7 percent of respondent lacked health insurance. Thirty-two percent of respondents described difficulty accessing healthcare in the past year, while 15.8 percent stated that cost was a factor in preventing the fill of prescriptions. On a positive note, 86.1 percent of individuals surveyed had a routine checkup in the past year while 86.1 percent of their children had annual health exams.

8.5 Implications for health services planning

Accessibility to culturally sensitive, affordable, quality care is paramount to ensuring the health of our community. Whether the care is urgent, emergent, or routine we will strive to promote access to care for our entire community.

Section 9: Existing Health Collaboratives and Key Community Stakeholders

Existing health collaboratives

Key community stakeholders

Overview

Working collaboratively with other providers, community groups, and government agencies is a cost-effective way to meet community health needs. It eliminates duplication of efforts, provides better coordination across the continuum of care, and enhances the outcomes of the individuals served. Therefore, CDH works collaboratively with community partners in many ways. These include coordinating care through referrals to community clinics and social services, direct financial support to enhance community-building activities, and indirect support through the provision of in-kinds donations and contributions. These efforts help meet the needs of underserved patients and provide critical public health services that protect all community members. Major ongoing collaborative efforts and key leaders include:

9.1 Existing health collaboratives

Improving access for the underserved

A broad-based collaborative involving CDH, as well as many other healthcare providers and social service agencies, addresses access issues for low-income and minority populations in DuPage County. These include in-kind service contributions and administrative support to DuPage Health Coalition's Access DuPage program for uninsured low-income adults, as well as federally qualified community health centers. Collaborative referral arrangements among participants help link patients to primary care physicians and other ongoing care.

Addressing chronic illness and mental health needs

Efforts led by the county health department are underway to create the comprehensive network of preventive, wellness, maintenance, and social support services needed to improve the lives of community members suffering from chronic illness and mental health issues. CDH and other providers are participating.

Promoting wellness and prevention

CDH joins other providers and community groups in addressing a variety of community-wide health challenges including childhood and adult obesity and prevention of heart disease, cancer, and stroke.

9.2 Key community stakeholders

9.2.1 DuPage County Health Coalition

Access DuPage is a collaborative effort by local individuals and organizations whose goal is to provide access to medical and mental health services to low-income residents in DuPage County. The program is a partnership of hospitals, physicians, local government, human service agencies, and community groups. It provides services to adult county residents who are under age 65, have household incomes below 200 percent of the federal poverty level, have no medical insurance, and are not eligible for public health insurance plans. The average weekly enrollment for Access DuPage in 2012 was 9,696 people. The total number of persons enrolled at some point during 2012 was 14,402 with a re-enrollment rate from of 63.8 percent.

9.2.2 DuPage County Health Department

The DuPage County Health Department, located in Wheaton, Illinois, is charged with providing core public health functions related to assessment, assurance, and policy development. To that end, the health department offers a comprehensive array of services designed in response to community need and public mandate. CDH, as well as other DuPage County hospitals, health professionals, and health-related social service agencies, support the health department in a variety of ways including participation in the IPLAN process and Mental Health Initiative. The health department is an anchor member of the DuPage Health Coalition, and their executive director serves on the board. The health department also serves as the fiduciary agent for the FORWARD initiative.

9.2.3 DuPage Federation on Human Service Reform

The DuPage Federation on Human Services Reform is a collaboration of government and key community organizations that identify ways a local community can address its human needs using its own resources and resourcefulness. The federation serves as an organizer and catalyst in DuPage County, bringing together the responsible organizations and advocating for the development of real solutions. The organization effects change by managing collaborations and projects, identifying needed systems changes, and making recommendations for improvement. The federation's value lies in its expertise and objectivity. The fact that it is not a direct service provider preserves its ability to look at the big picture, addressing cross-categorical problems in human services. This is achieved through a strong, involved board, a synergistic partnership between board and staff, and through long-term relationships with key decision-makers and organizational partners (www.dupagefederation.org). CDH and other community providers participate actively in both the federation and its initiatives.

9.2.4 FORWARD initiative

FORWARD is a new leadership initiative aimed at reversing the trend of childhood obesity in DuPage County. One of the goals is to identify the magnitude of the problem in order to develop appropriate interventions. Preliminary data shows that the overweight and obesity rate for DuPage County is 60.9 percent. For youth between the ages of 5 and 17, the rate is 25.2 percent, down from 34 percent in 2009.

CDH and other community providers and groups actively participate in this coalition by providing funding, planning, leadership, and in-kind support for research and outreach activities.

9.2.5 IPLAN 2015

IPLAN (Illinois Project for Local Assessment of Needs) is a series of planning activities led by the certified local health department. IPLAN 2015 clearly demonstrates the DuPage County Health Department's commitment to the Ten Essential Public Health Services.

9.2.6 Municipalities, school and park districts, and non-governmental community groups

In addition to the collaboratives noted above, CDH maintains direct relationships with a variety of government and non-government organizations throughout its service area. These include municipalities, park districts, school districts, churches, service clubs, and research and support organizations such as the American Heart Association. Assistance from CDH and other community providers includes in-kind donations, fundraising support, and participation in wellness, prevention, screening, and other health-related activities.

CDH has a long-standing history of providing support, leadership, and coalition-building in support of health and wellness initiatives. Highlights of these programs are detailed in our annual community benefit report.

9.2.7 Other key stakeholders

DuPage Community Hunger Network
http://communityhungernetwork.org/

Northern Illinois Food Bank
http://solvehungertoday.org/

People's Resource Center (PRC)
http://www.peoplesrc.org/

Proactive Kids Foundation
http://proactivekids.org/about

Meier Clinic's Family Bridges
http://www.meierclinics.com/Illinois

Interfaith Mental Health
http://interfaithmhc.org/about-the-coalition

CDH priority initiatives FY 2013-2015

Americans are living longer but sicker. While we are experiencing consistent increases in life expectancy, our longer lives are burdened with increasing chronic illness. Sedentary behavior and preventable chronic disease are compromising our community's health. More than one-quarter of the population is obese and diabetes is at epidemic levels. Hand-in-hand with a decreasing quality of life is an astounding increase in the economic impact of managing these diseases. The Robert Wood Johnson Foundation estimates that by the year 2030 medical costs associated with treating preventable obesity-related diseases are estimated to increase to $66 billion dollars annually with a resultant loss in economic productivity of between $390 and 580 billion dollars annually. Additionally, it is estimated that diabetes and pre-diabetes related costs will account for approximately 10 percent of healthcare spending by the year 2020, at an annual cost of almost $500 billion dollars. (UnitedHealth Center Health Reform Report) A recent CNN documentary entitled *Escape Fire* drives home the stark reality that we can no longer afford to focus on acute care as the center of healthcare but must instead also focus on prevention, education and case coordination to maximize the health of our nation's most valuable asset – our people. As hospitals, we must continue to challenge ourselves to provide the highest quality, state of the art, health care to our community, but as experts in the healthcare industry, we must also look outside our doors and reach out to the communities we serve providing clinician-led education, prevention and case coordination strategies.

To that end, CDH has identified four priority needs that we believe will enable us and our partners to maximize the community benefit generated by our collective resources over the next few years. In selecting these priorities we considered the degree of community need for additional resources, the capacity of other agencies to meet the need, and the suitability of our own expertise and resources to address the issue. In particular, we looked for health needs that require a coordinated response across a range of health care and community resources. These needs can benefit from the integrated nature of our organization and our provider and community partners. The priorities are:

Access to care

An aging population, growing low-income population, and the flagging economy are creating a variety of access problems relating to both the affordability and availability of care. CDH seeks to promote access to care through

several initiatives which will be delineated within the Community Benefit Plan. Summarily, CDH will continue to work with individuals and families who receive care at the hospital and promote referrals to community clinics and physicians in an effort to link patients with medical home settings. This will be achieved by ensuring clients have ease of access to affordable, medically necessary inpatient care and have ready access to our financial assistance programs. In addition, CDH leadership will continue our partnerships and collaborations with local federally qualified health centers, free clinics, and the DuPage Health Coalition (Access DuPage) to promote access to medical home care upon discharge. Additional emphasis will also be directed towards assuring our patients are adequately linked to appropriate services upon discharge to ensure return to a healthy and successful optimum state of wellness while minimizing unnecessary re-hospitalizations.

Obesity

Nationally, more than 27.8 percent of adults are obese according to the National Health Rankings. Stemming the epidemic of obesity in our community has the potential to significantly improve the health of our community, decrease associated chronic disease and reduce healthcare costs over the long term. CDH is committed to continuing its partnership with the FORWARD initiative in the DuPage County Health Department as they plan and develop responses to the problem of obesity, with particular emphasis on childhood obesity. In addition we will continue our community education and outreach programming.

Mental health

Services for the chronically mentally ill are insufficient. Services for children, public aid recipients, and those suffering with substance abuse are also in short supply. In addition, gaps exist in education, screening, and referral of individuals with mental health concerns. The result is chronic conditions become debilitating and mental health issues are often missed in children. CDH's expertise in clinical services and management coupled with our partnerships with community mental health providers and agencies enables the hospital to address these issues in a coordinated way in a variety of settings. The county has initiated a Mental Health Council to further assess need and create collaborative responses. CDH will continue to participate in this initiative.

Chronic disease

As our nation and local communities continue to age, an increase in both the incidence and prevalence of chronic disease is expected. The existing healthcare delivery system is not prepared to provide comprehensive services that will be required to address these diseases, and the direct and indirect burden of chronic disease is likely to create significant financial strains for providers in the community. CDH is positioned to develop the coordinated response that will be required to address this trend. Public health experts speak to the importance of education to prevent the onset of disease and improve the healthy lifestyles along with screening to promote early detection and prompt treatment of disease states in an effort to limit associated disability. Additionally, education of individuals with chronic diseases to assist in the self-management of the disease will improve outcomes, lesson acute exacerbated episodes, and promote longer, healthier lives with an emphasis on living in an optimum state of wellness. CDH is committed to providing care along all three levels of the chronic disease continuum: education, screening, and management.

Additional areas of need

Two additional needs were identified in the Community Health Needs Assessment – prenatal and perinatal care for underserved populations and infectious and sexually transmitted disease rates above targets. While we still consider these as priority needs, we believe the most effective way to respond is by continuing to participate in county-led initiatives to address these concerns and supporting the work of qualified organizations providing ambulatory care to the underserved.

Child and maternal health

There is a need for additional effort to improve prenatal and perinatal care, and to target high-risk groups such as teenagers and older women in addition to monitoring historically higher infant mortality rates among African-Americans residents of DuPage County, suggesting that interventions targeting this population may help. We believe that we are best suited to assist in meeting these needs in two ways: (1) through the support of local medical home providers for the underserved and (2) by continuing to offer state of the art prenatal education services to all members of our community.

Infectious and sexually transmitted disease rates above targets

Maintaining high levels of vaccination in the population is the best way to control these diseases. Vaccine rates for pneumonia and flu among older DuPage residents are below national targets. Improving vaccine rates for established diseases requires public outreach and coordination among providers. Meeting emerging disease threats also requires highly coordinated rapid mobilization of public health and provider resources.

Areas of additional need: prenatal and perinatal care and infectious and sexually transmitted disease rates.

While still below national and state levels, rates of sexually transmitted disease have risen in DuPage County in recent years. Education and outreach as well as access to confidential and affordable treatment are needed to address these diseases.

CDH will continue to participate in county-led initiatives in these areas in addition to supporting the work of healthcare providers for the underserved.

Creating strategies in response to need—the next step

CDH will continue the work begun in this assessment by analyzing the priority needs identified, assessing our resources to be able to respond to the needs – both directly and in collaboration with community partners, and creating a Community Benefit Plan that will serve as a working document to develop a strategy for responding to the needs identified in our CHNA while also allowing us a framework for measuring our progress both qualitatively and quantitatively.

CDH will utilize the Healthy People 2020 model to guide us in the development of our strategy plan through the provision of scientifically-based objectives and benchmarks designed to assist public and private healthcare providers in the development of standardized, evidence-based practices and outcome measures.

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