A Message from our Executive Director and Chairman of the Board

We are thrilled to share with you the 2017 Health and Wellness Community Assessment, a living document intended to communicate important health related information to Oklahoma City and County residents about the health status of the zip code in which they reside. We are hopeful you will take this information and find opportunities for improvement in your community as well as seek out ways in which you can be a part of expanding the conversation and identifying needed resources to address our health issues. The Oklahoma City-County Health Department (OCCHD) staff and Board of Health and the Wellness Now Coalition have been busy the last few years adapting the way in which we deliver our services to meet the needs of the communities that we serve. Understanding that the landscape of healthcare and our role as public health professionals is continually evolving, we are dedicated to seeking opportunities to deliver health in a forward-thinking way. This has included integrating our public health services with primary care and behavioral health providers, the faith community, business leaders, education partners and many others. Thus, we have seen the conversation about health elevate within our community. Through partnerships with the City of Oklahoma City, Parks and Recreation Department, Oklahoma City Public Schools, UCO, OCCC, OU Physicians and the Metropolitan Library System of Oklahoma City, we have begun work on the Southern Oaks Learning and Wellness Campus in south Oklahoma City. This campus will serve many students and their families in the community and create access to much-needed resources for living healthy and productive lives.

OCCHD is committed to continue working with our partners, both traditional and non-traditional, to leverage resources and develop strategies for improving health. The Wellness Score provides an illustration of the impact social, physical and environmental determinants have on both community and individual health outcomes. It is utilized in planning resource allocation and next steps for the investment of community programs and amenities to create access to things that make us healthy. Healthier citizens create a cost savings to our tax payers, and the increased quality of life gives Oklahoma City a competitive edge in business development.

Although we are encouraged by many of the improved areas of health and the priority being placed on health and wellness, there is still much work to be done. While we are excited to celebrate our successes in this updated report, we are also aware that our state continues to be outperformed nationally in health improvement, and as the largest metropolitan health department in Oklahoma, we seriously take our role in reversing those trends. We look forward to expanding the robust partnerships being supported and maintained through the Wellness Now Coalition and continue to celebrate our successes.

Sincerely,

Gary Cox, JD, Executive Director

Gary Raskob, PhD, Chairman, Board of Health

TABLE OF CONTENTS

Overview 4

Methodology 6

Strengths and Themes 10

Forces of Change 12

Local Public Health System Assessment 14

Chapter 1
Population 17

County Specific Total Population 18
County Specific Population Change 20
County Specific Age and Gender 22
County Specific Race 30

Chapter 2
Socioeconomic 33

Median Household Income 34
Households with SSI and SNAP 35
Poverty 36
Unemployment 38
Education Attainment 39
Free or Reduced Lunch 40

Chapter 3
Maternal and Child Health 43

Crude Birth Rate 44
Fertility Rate 46
Births to Teens 48
Low Birth Weight 50
Premature Births 52
Late or No Prenatal Care 54
Maternal Smoking During Pregnancy 56
Maternal Education 58
Infant Mortality Rate 60
Single-mother Family Household 62

Chapter 4
Infectious Disease 65

Enteric Disease 66
Respiratory Disease 68
Vectorborne Disease 70
Bloodborne Disease 72
HIV/AIDS 74
Chlamydia 76
Gonorrhea 78
Syphilis 80

Chapter 5
Mortality Rates 83

All Cause Mortality 84
Cardiovascular disease 86
Stroke 88
Heart Attack 90
Diabetes 92
Hypertension 94
Chronic Lower Respiratory Disease 96
Chronic Liver Disease and Cirrhosis 98
Cancer 100
Breast Cancer 102
Lung Cancer 104
Prostate Cancer 106
Alzheimer's 108
Influenza and Pneumonia 110
Unintentional Injury 112

Chapter 6
Mental and Social Health 115

Mental Health Visits 116
Substance Abuse Visits 118
Child Abuse and Removals 120
Suicide Mortality 122

Chapter 7
Healthcare Access 125

SoonerCare Member Emergency Department Visits 126
Oklahoma City-County Inpatient Hospital Utilization 128
ESSENCE Emergency Department Surveillance Encounters 130

Chapter 8
Environment 133

Grocery Store Availability 134
Housing Security 136
Transportation Security 138
Consumer Protection 140

Chapter 9
Crime 143

Homicide Mortality 144
Aggravated Assaults 146
Gun-related Mortality 148

Chapter 10
Overall Wellness Score 151

Years of Potential Life Lost 152
Overall Life Expectancy 154
Health Index Profile 156

Glossary 158
References 160
Acknowledgments 163
Notes Section 164

OVERVIEW

The Oklahoma City-County Health Department (OCCHD) utilizes the Mobilizing for Action through Planning and Partnership (MAPP) tool to conduct community-wide health needs assessments. The MAPP process engages a broad and diverse coalition of stakeholders to collect qualitative and quantitative data across four distinct assessments that include the Wellness Score (Community Health Profile), Strengths & Themes, Forces of Change, and the Local Public Health System Assessment. Each assessment utilizes a distinct methodology, representing a robust cross-section of quantitative and qualitative data.

Wellness Score

The purpose of the Wellness Score is to provide an overall summary of community health status. This information represents the foundation of planning and program development for improving health outcomes for our community.

OCCHD consulted with representatives from several agencies in Oklahoma County to obtain a list of variables that include both determinants and outcomes of health and wellness for our community residents. For inclusion in the Wellness Score, data had to be collected at a zip code level and available for the 2013-2015 time frame.

Strengths & Themes

This assessment seeks community feedback to identify strengths and themes that influence our local population's health and well-being. It is commonly administered through surveys and was translated for respondents who speak only Spanish. Surveys were administered both electronically and in the paper version. They were conducted to measure the perception of well-being among residents and to provide new information about strengths and themes in our community.

Forces of Change

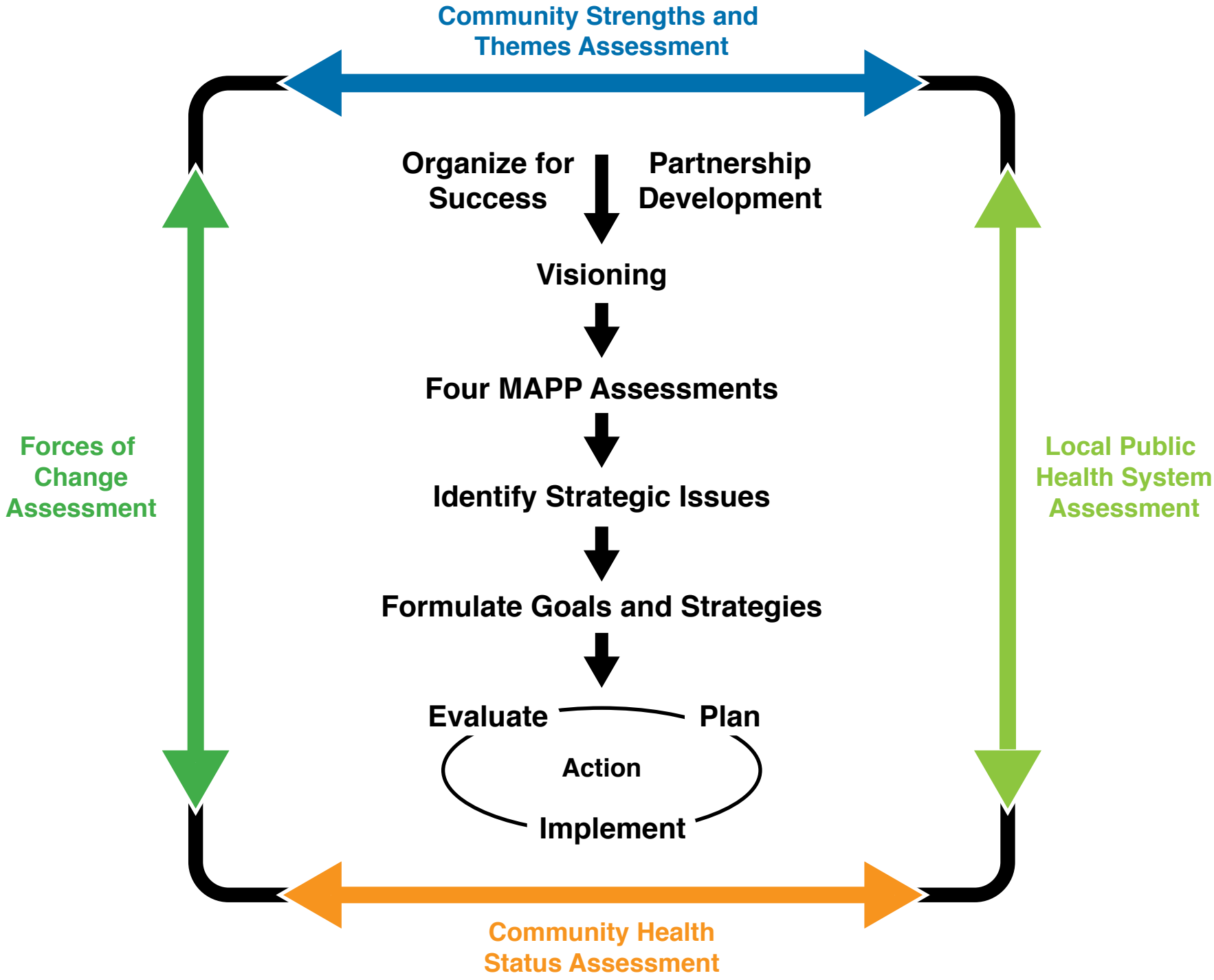
The purpose of this assessment is to determine, through community feedback and participation, what barriers and supports exist for improving community health. The feedback for the assessment is typically collected through town hall meetings, focus groups, and stakeholder interviews.

Four town halls were held November 2016 in each quadrant of OCCHD's jurisdiction.

Local Public Health System Assessment (LPHSA)

The purpose of LPHSA is to bring together traditional and non-traditional providers of services that impact our health outcomes to assess our community's capacity to meet the health needs of our residents. The assessment is completed utilizing the National Public Health Performance Standards Program (NPHPSP) and is typically completed in one day.

OCCHD facilitated the NPHPSP in November 2016 with more than 50 individuals representing over 30 individual agencies and communities. The Centers for Disease Control and Prevention (CDC) calculates the assessment results and generates a profile report enabling the local public health system to identify gaps in capacity and strengths of the system.


Community Strengths and Themes Assessment
Organize for Success
Partnership Development
Visioning
Four MAPP Assessments
Identify Strategic Issues
Formulate Goals and Strategies
Evaluate
Plan
Action
Implement
Forces of Change Assessment
Local Public Health System Assessment
Community Health Status Assessment

METHODOLOGY

Data Overview

The Oklahoma City-County Health Department (OCCHD) consulted with representatives from several agencies in Oklahoma County to obtain data variables. MyHealth Access Network was contracted to support with data management. Data analysis was divided into 10 different categories as outlined in this report. The variables include both determinants and outcomes to assess the health and wellness of populations in multiple aspects of life.

Zip Code Level

Many of the health indicators in this assessment are defined at the zip code level and are presented for the 63 zip codes located in Oklahoma County. However, maps and tables in the profile display only 56 zip codes since data for two sparsely populated zip codes have been combined with adjacent zip codes and five zip codes had less than 25 percent of their population within Oklahoma City-County jurisdiction (see the next section for more information on this topic). This more visual approach to data presentation is intended to promote easier identification of health concerns for specific areas of the county, and therefore, assist in targeting programs, resources, and necessary interventions where they are most needed.

Zip Code Visualization

The maps represent the zip codes of the Oklahoma City-County Health Department's jurisdiction, which includes all of Oklahoma City and all of Oklahoma County. The zip code boundaries were retrieved from the 2015 U.S. Census Topologically Integrated Geographic Encoding and Referencing (TIGER) Files, Oklahoma's State level geodatabase. To accurately represent the Wellness Score data, some zip codes were graphically combined into one. Minor stretching or skewing of the original maps may have occurred. Some zip code boundaries were smoothed or clipped to aid in printing and to make the maps more visually appealing. As such, these maps are meant for a general visual representation of data only and are not meant for cartographical purposes. These maps are meant to be viewed and displayed as printed.

Border/Combined Zip Codes

Oklahoma County has nine zip codes that are shared with adjacent counties but are primarily in Oklahoma County. These zip codes are 73007, 73025, 73034, 73045, 73054, 73099, 73165, 73170 and 74857. Data for two zip codes that lie entirely within Oklahoma County is combined with adjacent zip codes in this profile due to the small populations residing in each. These zip codes are 73066 and 73097, and when viewed on the maps throughout the profile, will be combined with and represented as 73020 and 73169, respectively.

In addition, Oklahoma County includes small proportions, less than 25 percent of the population, of five zip codes that are shared but lie primarily in adjacent counties. The data for these partial zip codes (73026, 73064, 73071, 73078 and 73160) have been excluded due to their small resident populations and the instability of rates computed based on small numbers of events.

Rates

This profile presents most of the information in the form of 'rates'. Rates allow for easier comparison to other populations and geographic areas. Rates are developed by dividing the total number of events by the total population (or the population at risk of the event) in the same specific area. Rates in this profile are computed per 1,000 or 100,000 population. The report also contains both crude and age-adjusted death rates (see glossary for definition).

In general, areas of a larger population can be expected to support more reliable rate calculations. Note that zip codes 73007, 73054, 73102, 73103, 73104, 73121, 73128, 73131, 73134, 73141, 73145, 73149, 73150, 73151, 73169, 73173, and 73179 all have populations less than 5,000. Caution should be exercised in interpreting data for these less-populated areas as they can potentially result in misleading comparisons with other zip codes. In addition, the calculation of rates is not recommended when there are less than five indicator counts due to confidentiality and reliability concerns.

Data Breaks

When viewing a map, the zip codes are grouped for presentation by natural breaks in each separate data set. Jenks Natural Breaks is the statistical method of grouping data into classes where data is most similar to each other and was developed by the cartographer George Jenks. Jenks' method was calculated by the geographic information system software, ArcGIS, used to produce the maps presented in this report. Use of 5 classes of natural breaks supports a user-friendly visual representation of the geographic distribution of risk factors and outcomes of health data in Oklahoma City-County.

The data groups are represented by shading with the darkest color being the worse outcome for each health disparity and the lightest being the best from available data. This compares data from best to worst within the Oklahoma City-County jurisdiction, it is not comparing to any standard.

Data Availability

Zip codes are displayed without shading when there is data missing or unavailable for the specific zip code or with rate denominators less than 5. This is designated in each table below the corresponding map.

Descriptive Statistics

The profile uses tables, graphs, charts, maps, and narrative to statistically describe the factors that affect the health of the Oklahoma City-County community.

The information presented includes both risk factors and health outcomes. Geographic and demographic areas of public health concern can be identified by evaluating data presented for each of the Oklahoma County zip codes.

Time Period

Data throughout the profile are generally included for the years 2013-2015 depending on the availability of data for the specific topic. Therefore, most data are average annual rates over a three-year period.

All zip code level population data is based on 2013-2015 estimates.

Health Index Calculation

As the two largest metropolitan areas in Oklahoma, Tulsa Health Department and the Oklahoma City-County Health Department partnered in the development of a health index formula to allow for comparisons within and between both city-county jurisdictions. The formula was adapted from both the County Health Rankings and Urban Hardship Index, and finalized in collaboration with the City of Oklahoma City and Tulsa.

The health index formula standardizes each of the component variables so that they are all given equal weight in the composite index. The index represents the average of the standardized ratios of all nine component variables. The index ranges from 0 to 100 with a higher number indicating greater hardships.

Formula

$X= ((Y-Y_{min})/(Y_{max}-Y_{min}))*100$

- X= Standardized value of component variable (for each zip to be computed)
- Y= Unstandardized value of component variable for each zip
- Y_{min}= Minimum value for Y across all zips
- Y_{max}= Maximum value for Y across all zips

Scale

0 to 100 with a higher number indicating greater health burden

The nine factors that contribute to the health index are:

- **Education**
  Percent of population with less than a high school education
- **Income**
  Percent of population below poverty
- **Maternal and Child Health**
  Infant mortality rate (infant deaths/1,000 live births)
- **Mental Health**
  Age-adjusted suicide deaths/100,000 population
- **Mortality**
  Life expectancy ages 0-4
- **Healthcare Access**
  ER visits/hospital utilization
- **Crime**
  Gun-related deaths/100,000 population
- **Infectious Disease**
  STD and TB rate
- **Built Environment**
  Positive land use, negative land use, transportation security, and housing security

METHODOLOGY CONTINUED

Mortality Rates

All calculations utilized 2013-2015 Oklahoma City-County Death Records and the following 10th revision of the International Classification of Diseases (ICD-10) codes.

Measure	ICD-10 Codes
Age-adjusted Cardiovascular Disease Mortality Rate	I00-I78
Age-adjusted Heart Disease Mortality Rate	I00-I09, I11, I13, I20-I51
Age-adjusted Stroke Mortality Rate	I60-I69
Age-adjusted Hypertension Mortality Rate	I10, I11.0, I11.9, I12.0, I12.9, I13.0, I13.1, I13.11, I13.2
Age-adjusted Heart Attack Mortality Rate	I214, I219, I22
Age-adjusted Diabetes Mortality Rate	E10-E14
Age-adjusted Chronic Lower Respiratory Disease Mortality Rate	J40-J47
Age-adjusted Chronic Liver Disease Mortality Rate	K70, K73-K74
Age-adjusted Cancer Mortality Rate	C00-C97
Age-adjusted Breast Cancer Mortality Rate	C50
Age-adjusted Lung Cancer Mortality Rate	C34
Age-adjusted Prostate Cancer Mortality Rate	C61
Age-adjusted Alzheimer Mortality Rate	G30
Age-adjusted Influenza and Pneumonia Mortality Rate	J09-J18
Age-adjusted Unintentional Injury Mortality Rate	V01-X59, Y85-Y86
Age-adjusted Suicide Mortality Rate	X60-X84, Y87.0
Age-adjusted Homicide Mortality Rate	X85-Y09, Y87.1
Age-adjusted Firearm Related Mortality Rate	W32-W34, X72-X74, X93-X95, Y22-Y24, Y35

Changes from Previous Years

There were 15 major changes/replacements to the 2017 Wellness Score compared to previous health profiles.

Addition of Fertility Rate Calculation: Fertility rate is the number of live births per 1,000 women aged 15-44 years and is in important indicator of population growth.

Teen Birth Rate: Zip code level teen birth rate is presented in this publication. The previous Wellness Score presented percent of births to women 19 years of age and younger.

Life Expectancy: The life expectancy indicator was added to this publication and was included in the Health Index.

Years of Potential Life Lost: The years of potential life lost (YPLL) indicator was added to this publication.

Hospital Discharge Data was requested and provided by the Oklahoma State Department of Health. This is a data source that was not included in prior publications.

ICD-10 codes were grouped into categories that best followed Centers for Disease Control and Prevention strategies. The ICD-10 codes used for each mortality rate is included in the Mortality Chapter of the publication.

Deaths due to unintentional injury were added to this publication.

Alzheimer's mortality rates were added to this publication.

Chronic Liver Disease and Cirrhosis mortality rates were added to this publication.

Health Index profile: Collaboration with the City of Oklahoma City and Tulsa Health Department is a new addition to the publication.

Infectious Disease categories were grouped according to reportable disease compared to the previous health profiles methodology of grouping infectious disease rates.

Sexually Transmitted Disease data was included in this score, which had not been previously included.

Vectorborne Disease and public health protection information was added to this version of the publication.

Consumer Protection Complaints and Violation data was added to this publication.

Emergency Room Use by SoonerCare members was added to the emergency room visit summary.