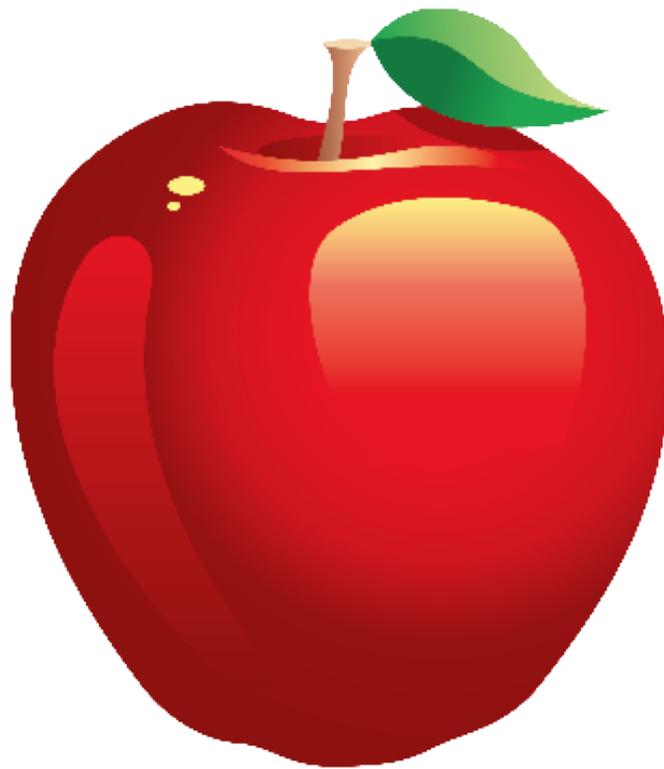


WE CAN DO BETTER

IMPROVING THE **HEALTH** OF THE OKLAHOMA PEOPLE



THE 2014 OKLAHOMA ACADEMY TOWN HALL

Artesian Hotel, Sulphur, - October 26-29

The Oklahoma Academy

The Oklahoma Academy is a statewide nonprofit, nonpartisan, membership organization founded by Governor Henry Bellmon in 1967, and revitalized by him in 1985, to bring public attention to policy issues, provide objective, thorough research and act as a catalyst for positive change.

The Mission of the Oklahoma Academy is to identify issues facing Oklahoma, provide well-researched, objective information, foster nonpartisan collaboration, develop responsible recommendations, and encourage community and legislative action.

The Vision of the Oklahoma Academy is to empower Oklahomans to improve their quality of life through effective public policy development and implementation.

The Academy Process identifies areas of need and problems facing Oklahoma, conducts research on identified critical issues, and develops long range goals, consensus recommendations, and agendas for action. Through the Town Hall conference process, forums and summits, the Academy increases citizen awareness, encourages civic engagement and sets the stage for thoughtfully improving Oklahoma.



Moving Ideas Into Action

The Oklahoma Academy, 411 West Main Street, Suite 390, Norman, OK 73069
405.307.0986 (phone) 405.307.0947 (fax) Email: jennifer@okacademy.org

WELCOME



*Gerry Clancy, MD
Co-Chairman*



*Kay Goebel, PhD
Co-Chairman*



*Steve Prescott, MD
Co-Chairman*



*Julie Knutson
President and CEO*

October 2014

Dear Town Hall Member:

Please know that you are charged with participating in the Town Hall, not just sitting. You will be given an excellent opportunity to listen actively, share your thoughts and concerns, and build, with your fellow participants, a set of consensus findings and recommendations that dramatically change the course of action for the better in the health of Oklahomans. Others will be relying upon you and your fellow participants to have done your part.

You cannot participate effectively if you are not familiar with the contents of this background resource book prior to the beginning of the 2014 Town Hall.

The Town Hall is a serious three-day focus planned to yield thoughtful, sound findings. The success of any Town Hall is dependent upon the preparedness of its participants. You will hear some excellent plenary session speakers; you will have excellent Panel Discussion Sessions. You have the opportunity to “knock the socks off” how we craft a strategy to improve health of Oklahomans. The Town Hall is work, but it is by no means ominous! Lively discussions and meeting new people make this a true “one of a kind” experience. You will have fun!

Special thanks to Mike Lapolla, Craig Knutson and Jamie Wade. They have put in yeoman’s work in producing this book for you. Craig and Mike have voluntarily produced every Town Hall book since 2001. Good for them, and very lucky for us!

Moving Ideas Into Action

The Oklahoma Academy, 411 West Main Street, Suite 390, Norman, OK 73069
405.307.0986 (phone) 405.307.0947 (fax) Email: jennifer@okacademy.org

Town Hall CliffsNotes

The Oklahoma Research Production and Design Team

Educate yourself before listening. Listen before talking. But when you do speak, be informed, confident and creative in both your analysis and suggestions.

This Town Hall could take many directions. It is important that everyone stay focused. This will not be easy. Try! These Cliff's Notes should help. The overarching issue is that by almost every measure, the health of Oklahomans is not as good as many Americans elsewhere. While we could become lost following theories, anecdotal rabbit trails and false leads, we will use two primary anchors for our thinking and discussion.

- The first will be The 2007 Shattuck Lecture and its accompanying graphic model of how the various determinants of health contribute to longevity, and presumably better health. It is in our Preamble. We will address 4 of the 5 determinants of lifespan and health. The topic of genetics will be “off the table”. It is a complex scientific issue best left to another venue/audience for debate and discussion.
- The second, and related to the first, is the Age Adjusted Death Rate for our state. See Section 5. This is a standard measure of premature death - and by implication, health status that could use improvement. We consider the AADR to be the “uber-metric” that will keep us focused. Other health status metrics are in Section 3 and 4. Ultimately all reflect our Oklahoma culture.

Our Section 1 discusses Culture. We look at our Oklahoma culture and speculate how these beliefs and behaviors may affect health. If behaviors are both important and predictive, knowing the nature of our culture is key to understanding approaches that may be effective. And we look at Colorado and the culture of health created there. Our Sections 3-5 presents lots of valuable Health Data. These data tell us where we are and suggest future corrective directions.

Section 6 will focus upon Young Oklahomans. Read about the “Four Aces”. As a group, young Oklahomans will benefit the most from any positive recommendations we can make. Section 7 addresses Mental Health and makes us wonder why we separate mental and physical health - and why we have two separate state agencies dealing with health. It leads one to wonder why “brain health” is different from heart disease, cancer and other physical issues. Finally in Sections 9-12 we will present perspectives of the key factors in determining both health and longevity.



Michael Lapolla
Production/Design Editor



Craig Knutson
Production Coordinator



Jamie Wade
Production/Design Assistant

October 26-29, Artesian Hotel, Sulphur

CONTENTS DIRECTORY

Preamble

WE CAN DO BETTER

Certain Unalienable Rights Steven Prescott, MD, Co-Chairman 2014 Town Hall.....	20
The Power of Attitude Kay Goebel, PhD, Co-Chairman 2014 Town Hall.....	21
The 2007 Shattuck Lecture Steve Shroeder, MD, Distinguished Professor of Health and Health Care, UCSF, San Francisco	22

Section 1

CULTURE AND HEALTH

The Oklahoma Culture and Health John Feaver, PhD, President, University of Science and Arts, Chickasha.....	32
The Colorado Culture of Health Gerard P. Clancy, MD, Co-Chairman, 2014 Town Hall	38

Section 2

THE NEWSPAPERS SAY

October 21, 1991 Michael Lapolla, 1991 Chairman, Health Care Task Force, Oklahoma Academy.....	44
Prescription for Mental Health: Seattle Times Gabriel Campanario and Editorial Board, Seattle Times, August 16, 2014.....	45
We Should ... Quit Abusing Drugs Owen Canfield, Editorial Board, The Oklahoman.....	49
We Should ... Address Mental Health Editorial Board, The Tulsa World.....	50
We Should ... Re-examine Physician Production Editorial Board, June 29, 2014, The Sunday (Lawton) Constitution.....	51
We Should ... Modify Our Behaviors Editorial Board, The Lawton Constitution	53
We Should ... Increase Physical Activity Editorial Board, The Muskogee Phoenix	54
We Should ... Do More For The Mentally Ill Julie DelCour, Associate Editor Tulsa World (March 21, 2014).....	55
We Should ... Do All The Above Editorial Board, The Journal Record	57

Section 3
HEALTH RANKINGS

Overall Health Ranking
United Health Foundation 2014 60

Seniors Health Ranking
United Health Foundation 2014 61

Mental Health Ranking
National Alliance on Mental Illness 62

Section 4
STATE OF THE STATE HEALTH

Oklahoma’s State of the State Health
Terry Cline, PhD, State Department of Health 66

Report Summary 67

Total Mortality 69

Heart Disease 70

Smoking and Cancer 71

Physical Health Metrics in Oklahoma County
Gary Cox, JD and Alicia Meadows, MPH, MBA, Oklahoma City-County Health Department 72

Section 5
PREMATURE DEATH DATA

Premature Death Data 1968-2010 76

Oklahoma & United States (1968-2010) 77

Colorado & New York (1968-2010) 78

AADR Change (1982-2012) in Oklahoma Counties
OK2SHARE Database, Oklahoma State Department of Health 79

Section 6
YOUNG OKLAHOMANS

ACE: The Ticking Time Bomb
Anne Roberts, Director of Legislative Affairs, INTEGRIS Health, Oklahoma City 82

ACE v2.0 - Brain Health
Robert W. Block, MD, FAAP, Emeritus Professor of Pediatrics, OU School of Community Medicine, Tulsa 85

ACE v3.0 - Ending Toxic Stress
Robert W. Block, MD, FAAP, Past President (2011-2012), American Academy of Pediatrics 86

ACE v4.0 - The Academy on Violence and Abuse
Robert Block, MD, FAAP, Past President and Member of Board of Directors, AVA 87

Schools for Healthy Lifestyles Mac McCrory, EdD., John Bozalis, MD and Michael Crutcher, MD, MPH.....	88
Physical Fitness: Miracle-Gro for the Brain Thomas Wesley Allen, DO, MPH, University of Oklahoma School of Community Medicine.....	90
Physical Activity and Obesity State of the State Health Report 2014.....	92
Our Next Generation’s Health Kaitlyn MacGregor, Health Corps.....	93
Are Education Policies Killing Us? Lauren Brookey, Vice President of External Affairs, Tulsa Community College.....	95

Section 7
MENTAL HEALTH

Mental Health and Addiction Terri White, Commissioner, Oklahoma Department of Mental Health and Substance Abuse Services.....	98
Mental/Physical Health Teresa Meinders Burkett, RN, BSN, JD, Tulsa.....	102
Going All Out To Defeat Mental Illness Richard Wansley, PhD, Oklahoma State University Center for Health Sciences.....	104
Oklahoma Mental Health Mary Ellen Jones, Board Member, National Alliance on Mental Illness.....	106
Let’s Strengthen Our Mental Health Laws Richard Wansley, PhD, Oklahoma State University Center for Health Sciences.....	108
Myths of Smoking Pot Ruth Markus, Washington Post, June 24, 2014.....	109

Section 8
TRIBAL HEALTH

Tribal Health Care in the 21st Century Chuck Grim, DDS, Cherokee Nation, Bill Lance, Chickasaw Nation and Production Team.....	112
---	-----

Section 9
HEALTH SERVICES

Is Charity Still Needed? Meet Lucy ... Stanley F. Hupfeld, Health Alliance for the Uninsured, Oklahoma City.....	122
---	-----

The Remaining Uninsured v1.0 Carly Putnam, Policy Analyst, Oklahoma Policy Institute	124
The Remaining Uninsured v2.0 Brent Wilborn, Director of Public Policy, Primary Care Association of Oklahoma, Oklahoma City	128
Access to Services in Oklahoma County Gary Cox, JD and Alicia Meadows, MPH, MBA, Oklahoma City-County Health Department	130
We Can Do Better ... Women and Children Jan Figart, MS, RN, Community Service Council	132
Women and Oklahoma Health Diana Hartley, Executive Director, Oklahoma Women’s Coalition	135
Health and Rural Oklahoma Jeff Hackler, JD, Chad Landgraf, MS and Denna Wheeler, PhD, Center for Rural Health, OSU, Tulsa	137

Section 10

BEHAVIOR PATTERNS

Our Oklahoma Turning Point Survey Craig Knutson, Chief of Staff, Oklahoma City University	142
Oklahoma’s Meal: If Food is a Problem ... Mike Lapolla, Academy Research Design and Production Committee	146
Fruit and Vegetable Consumption: State of the State Health Report 2014	147
Diabetes Sucks! Craig Knutson, Academy Research Design and Production Committee	148
Diabetes: State of the State Health Report 2014	149
The 10th Ranked State Coincidence? Robert De Vogli, MPH, PhD, University of California, Davis	150
OSU Incorporates the National Prevention Strategy Suzy Harrington, DNP, RN, MCHES, Oklahoma State University, Stillwater	152
Best Practices in Oklahoma County Gary Cox, JD and Alicia Meadows, MPH, MBA, Oklahoma City-County Health Department	155
Technology vs. Abuse of Legal Drugs David Kendrick, MD, CEO MyHealth and Joe Cunningham, MD	157
Employers Can (Should) Be Health Leaders Rhonda Simpson, Oklahoma City Community College	158

The Oklahoma City Diet Mick Cornett, Mayor, Oklahoma City	161
Oklahoma Ingenuity and Health Jeff Green, CEO, MedEncentive	163

Section 11

SOCIAL CIRCUMSTANCES

Health Equity Oklahoma Health Equity Campaign	168
Perspectives on Violence Jeff Hamilton and Oklahoma Committee on Violence and Public Health	170
Coping with Bullying and Relational Aggression Shannon Evers, CEO, Girl Scouts of Western Oklahoma	172
Health Literacy Marshan Marick, Oklahoma Health Equity Campaign	174
Health and Poverty Tom Martindale, Coordinator, Building Bridges for the Future, Muskogee	177
Improving Food Security Cari Ogden, Regional Food Bank	178

Section 12

ENVIRONMENT

Health Impact Assessment John Tankard, Oklahoma Health Equity Campaign	182
Homelessness Costs A Lot Governor’s Interagency Council on Homelessness	184
Secure Housing: A Prescription for Health Gregory A. Shinn, MSW, Associate Director, Mental Health Association Oklahoma	187
Public Transportation and the Public’s Health Oklahoma Health Equity Campaign	188

2014 Town Hall Leadership

GERARD CLANCY, MD

Gerard P. Clancy, M.D., President - The University of Oklahoma-Tulsa, Professor - Department of Psychiatry, Endowed Chair - Morningcrest Health Care Foundation Chair in Leadership

Dr. Gerry Clancy earned a Bachelor of Science degree in Biochemistry in 1983; completed an American Heart Association Basic Science Research Fellowship in 1985; and received his medical degree in 1988. Dr. Clancy continued his residency training in Psychiatry at the University of Iowa.

Dr. Clancy began active duty in the United States Air Force in 1992. He was promoted to Major, graduated from pilot survival school, served as a flight surgeon and flew B1, B52, T38, and KC135 aircraft and H1 helicopters.

In 1995, he returned to the University of Iowa as a faculty member in the Department of Psychiatry. In 1998, he was named University of Iowa College of Medicine Assistant Dean of Students. He also assumed duties as Vice Chairman of the Department of Psychiatry in 1999.

In 2001, Dr. Clancy was named Dean of the University of Oklahoma (OU) College of Medicine, Tulsa. In 2006, he also assumed the duties of President of the University of Oklahoma, Tulsa campus.

In 2011, he served as the Chairman of the Board of the Tulsa Metro Chamber of Commerce. In that work, he has recently led a task force of area leaders to create a common vision for regional economic development. For 2014, Dr. Clancy is the Campaign Chair and Incoming Chairman of the Board of the Tulsa Area United Way.

He has been married 29 years to Paula with 3 children, Sam 23, attending the OU Law School, Mary 20, attending the OU Speech Pathology Program and Joey 15, a sophomore at Booker T. Washington.



KAY GOEBEL, PHD

Kay is a Psychologist in Private Practice in Oklahoma City.

She is Board Chair for the Girl Scouts of Western Oklahoma, on the Executive Committee of the Oklahoma Academy, Mid America Arts Alliance, Calm Waters, the Cultural Development Corporation and the Oklahoma Aids Care Fund.

Kay is a past Board member of several organizations, Allied arts, Arts Council of Oklahoma City, the Oklahoma City Memorial, Oklahoma Arts Institute, and Planned Parenthood.

She is the Past Chair of the Oklahoma Arts Council, Arts Council of Oklahoma City and Calm Waters.

She has co-chaired several events, the OKC Arts Festival in 1995 and 1996, Juliette Low Luncheon, Allied Arts Campaign, Red Tie Night, Go Red for Heart Health and the Calm Waters 20th Anniversary Dinner.

Kay has received many awards for her leadership, including the Governor's Arts Award, Oklahoma Women's Hall of Fame, Oklahoma Academy Key Contributor Award, Distinguished Psychologist Award, Planned Parenthood Outstanding Board Service Award, Oklahoma City Universities Societies Award, By-Liner of the Year, Ladies in the News, and Association for Professional Fundraisers Volunteer Fundraiser of the year.

Kay has been a Speaker for the American Institute of Medical Education and has given talks on the psychological aspects of artists and their works. Some of the artists featured have been Michelangelo, Raphael, El Greco, Frederick Remington, Charles Russell and Alan Houser.

Kay received her Bachelor's degree from Oregon State University, Masters degree from Oklahoma City University and her Ph.D. from the University of Oklahoma.



STEPHEN PRESCOTT, MD

Dr. Prescott joined the Oklahoma Medical Research Foundation in 2006, becoming its ninth president. He came to OMRF from the University of Utah, where he founded the Eccles Program in Human and Molecular Biology & Genetics and served as the executive director of the Huntsman Cancer Institute, an NCI-designated cancer center.

Under his leadership, OMRF has earned eight consecutive four-star ratings – the highest possible – from Charity Navigator, the nation's leading nonprofit evaluator. During this time, The Scientist magazine has also named OMRF as one of its "Best Places to Work" in academia and for post-doctoral fellows for three straight years.

A native of Texas and an undergraduate at Texas A&M University, Prescott received his MD from the Baylor College of Medicine prior to completing his training in internal medicine at the University of Utah. After advanced research training at Washington University School of Medicine (St. Louis), he joined the faculty of the University of Utah, where he became a professor of internal medicine and held the H.A. & Edna Benning Presidential Endowed Chair. He has authored more than 250 scientific articles and trained more than 40 research students & postdoctoral fellows.

Dr. Prescott served as a senior editor of the Journal of Biological Chemistry and Journal of Clinical Investigation and on advisory committees for the National Institutes of Health, the American Heart Association, the American Cancer Society, and multiple universities.

He has been elected to the American Association for the Advancement of Science, the Association of American Physicians, the American Society for Clinical Investigation, the Royal College of Physicians in Ireland, and the Royal Academy of Medicine in Spain. He is the founder of LineaGen, a biotechnology company.



Resource Book Contributing Authors

THOMAS WESLEY ALLEN, DO, MPH

Dr. Tom Allen is a Clinical Professor in the Center for Exercise and Sports Medicine and Director of the Human Performance Laboratory at the University of Oklahoma School of Community Medicine, Tulsa where he also holds a faculty appointment as Adjunct Professor of Emergency Medicine - Disaster Medicine Section.

Dr. Allen also teaches at the OU College of Public Health where he is an Adjunct Professor of Biostatistics and Epidemiology.



He holds a Graduate Professional Certificate in Public Health and an M.P.H. (Masters of Public Health degree) from the University of Oklahoma with an emphasis in disaster preparedness and terrorism response. His medical training was in Chicago at both Midwestern University, where he received his DO degree, and at Northwestern University, where he completed his pulmonary medicine fellowship.

Dr. Allen is Board Certified in general internal medicine, pulmonary medicine, and sports medicine and is a Fellow of the American College of Physicians (FACP), the American College of Chest Physicians (FCCP), the American College of Osteopathic Internists (FACOI) and the American Osteopathic Academy of Sports Medicine (FAOASM). Dr. Allen has held faculty appointments at five medical schools and served as Dean at two.

He is currently active in the new approach to physical activity in schools – fitness based physical education. Called Learning Readiness Physical Education, this new P.E. has resulted in enhanced academic achievement, improvement in physical fitness, decreased school absences and fewer disciplinary actions in every school where it has been introduced.

ROBERT W. BLOCK, MD, FAAP

Dr. Robert Block is an Emeritus Professor of Pediatrics and immediate past Daniel C. Plunket Chair, Department of Pediatrics, The University of Oklahoma School of Community Medicine in Tulsa. He was elected by the membership of the American Academy of Pediatrics (AAP) as President-Elect in October, 2010, served as President from October, 2011 through October, 2012, and as Immediate Past President from October 2012 through December, 2013.



Dr. Block received his M.D. degree from the University of Pennsylvania, and completed his pediatric residency at the Children's Hospital of Philadelphia. He was appointed the first Chair of the newly formed subboard on Child Abuse Pediatrics by the American Board of Pediatrics (ABP) from 2006-2009, and continued to serve on the subboard through 2012. He holds Certificate #1 from the ABP in Child Abuse Pediatrics.

Dr. Block is a Fellow of the American Academy of Pediatrics, and former member and chair of the Academy's Committee on Child Abuse and Neglect. He is a former President and Board Chair of the Academy on Violence and Abuse (AVA), the relatively new national organization focused on increasing health care professionals' education, and academic research, on the health effects of violence and abuse.

Dr. Block was appointed Oklahoma's first Chief Child Abuse Examiner in 1989, and served in that capacity until October, 2011. He was a past Chair and member of the Oklahoma Child Death Review Board from 1992 through September, 2011.

JOHN BOZALIS, MD

Dr. Bozalis is the Chairman of the Board of Directors, Schools for Healthy Lifestyles; Retired Physician, Oklahoma Allergy and Asthma Clinic, 750 Northeast 13th Street, Oklahoma City, OK 7310



LAUREN BROOKEY

Ms. Brookey is the Vice President of External Affairs at Tulsa Community College,

She began her career as a journalist for a metropolitan daily newspaper and went onto a career as a public relations, marketing and public affairs professional. She now serves as Vice President of External Affairs for Tulsa Community College with strategic responsibilities for enrollment and efforts to secure public and private funding for the state's third largest higher education institution.



After working as a reporter for the Tulsa Tribune, Brookey joined the Metropolitan Tulsa Transit Authority becoming the Marketing and Communications Manager overseeing advertising, media relations and public affairs functions. In 1988, she joined the state's largest public relations firm becoming partner in 1995 and representing local, regional and national clients including Wal-Mart, Waste Management and banking entities.

In 2000, she joined Tulsa Community College as Vice President of External Affairs.

Ms. Brookey has a bachelor's degree in News Communications from the University of Oklahoma. She is past president of the local chapter of Public Relations Society of America (PRSA) both becoming accredited through that organization and receiving its Professional of the Year Award in 2000. She has two grown children and one grandchild.

TERESA MEINDERS BURKETT, JD

A former cardiac care nurse, Ms. Burkett is now a leader in the healthcare practice group at Conner & Winters, one of Oklahoma's largest law firms. As an attorney in the healthcare industry, Ms.

Burkett has led organizations across the state in their compliance efforts and addressing complex legal issues. Her practice focuses on advising healthcare providers about HIPAA compliance, Medicare and Medicaid reimbursement, medical staff concerns, employment law and corporate compliance issues.



Ms. Burkett has been included in Best Lawyers in America every year since 1992 and she is included in the list of the Top 25 Women Attorneys in Oklahoma by SuperLawyers. She also is ranked as a top health care lawyer by Chambers and Partners, USA. In October 2013, she was recognized for the third year in a row as an honoree at the Journal Record's Woman of the Year event, entering the Circle of Excellence, an honor recognizing women making a significant impact professionally and in their communities on behalf of the state of Oklahoma. She is active in Leadership Oklahoma, the Oklahoma Academy for State Goals, the Oklahoma Center for Healthcare Improvement, Center for Legislative Excellence and recently chaired the Health Care Task Force for the Tulsa Chamber of Commerce. She serves on the Tulsa Park Board and on the boards of numerous other community non-profit groups that serve to enhance the quality of life in Tulsa

MICK CORNETT

Oklahoma City Mayor Mick Cornett recently became the first mayor in that city's history to be elected to a fourth term.



Known for his commitment to streets and public safety, his growing list of individual awards and honors include nods for urban design, health, sports and the arts. In 2013, he was named the State of Oklahoma's Mayor of the Year. Newsweek named him one of the five most innovative Mayors in the United States in 2012. Governing Magazine named him the 2010 Public Official of the Year. And, over in Europe, a London-based organization, which studies Mayors and their work, listed him as the second-best Mayor in the world, second only to the Mayor of Mexico City.

Best known for leadership role in bringing the NBA to Oklahoma City and for famously putting the entire city "on a diet," Mayor Cornett has also guided the city to one of the nation's most robust economies. The Kauffman Foundation named Oklahoma City as the most entrepreneurial city in the country with the most start-ups per capita.

Mayor Cornett is a popular national speaker on the topics of health and wellness, urban design, placemaking and walkable cities. He earned a degree in journalism at the University of Oklahoma and an MBA from New York University.

GARY COX, JD

Mr. Cox has served as Executive Director of the Oklahoma City-County Health Department (OCCHD) since 2009. He received a JD from the University of Tulsa. He has previously served as an adjunct professor of environmental law and is presently serving as a visiting associate professor at the OU College of Public Health.



Before joining the Oklahoma City-County Health Department, Gary worked as an environmentalist for the Tulsa Health Department, where he went on to serve as Legal Counsel before eventually serving as Director for more than a decade.

He brings more than 35 years of public health experience to the Oklahoma City-County Health Department and includes in his leadership accomplishments Past President to both the Oklahoma Public Health Association (OPHA) and the National Association of County and City Health Officials (NACCHO). He serves on the Executive Committees for various national, state and local public health efforts including the RWJF Futures Project, the Oklahoma Health Improvement Plan, and the Central Oklahoma Turning Point Council.

Executive Director Cox is a nationally respected leader in Public Health, recently testifying before Congress regarding the national challenges of childhood obesity. He has also served as a grant review panelist for the CDC and is a member of the Public Health Law Research National Advisory Committee Member for the Robert Wood Johnson Foundation. Executive Director Cox has dedicated his career to improving health, raising the awareness about health issues across multiple sectors, and committing to developing and leverage private and public partnerships to improve community health outcomes.

MIKE CRUTCHER, MD, MPH

Dr. Crutcher attended the University of Oklahoma for undergraduate studies and medical school. After completing an internship in Internal Medicine in Oklahoma City in 1981 he spent 14 years in the United States Navy, working as a Flight Surgeon and Preventive Medicine Officer. He obtained his Master of Public Health degree and completed a residency in Preventive Medicine at Johns Hopkins University in 1988. He began working at the Oklahoma State Department of Health in 1995 and served as State Epidemiologist from 1995-2003, Commissioner of Health from 2003-2009, and Cabinet Secretary of Health from 2007-2009. In February 2012 he began work at Variety Care as the Director of Medical Quality. He holds adjunct faculty appointments at the OU College of Public Health and the OU College of Medicine. In 2004 he retired as a Captain from the U.S. Navy Reserves.



JOSEPH CUNNINGHAM, MD

Dr. Cunningham is Board Certified in Obstetrics and Gynecology. Cunningham spent 21 years in private practice and serving as Staff Physician at St. John Medical Center in Tulsa. He then joined Blue Cross and Blue Shield of Oklahoma in 2007 as the Medical Director of Medical Services over the Utilization Management and Case Management Departments. Two years later, he was named the company's Vice President of Health Care Management and Chief Medical Officer. A native of Siloam Springs, Ark.,



Dr. Cunningham earned an undergraduate degree in chemistry and attended medical school at the University of Arkansas. He also

conducted post-graduate studies at the University of Oklahoma – Tulsa. Dr. Cunningham is a Fellow of the American College of Obstetricians and Gynecologists, and he is a member of both the Oklahoma State Medical Association and the Tulsa County Medical Society. Dr. Cunningham lives in Tulsa with his wife, Mary. The Cunninghams have two sons, both of whom are medical doctors.

LCDR JULIE ERB- ALVAREZ, MPH

Lieutenant Commander Julie Erb-Alvarez, MPH currently serves as the Area Epidemiologist for the Indian Health Service (IHS) Oklahoma City Area (OCA), United States Public Health Service. LCDR Erb-Alvarez co-chairs the IHS OCA Institutional Review Board and leads the Improving Patient Care Improvement Support Team for the Area. LCDR Erb-Alvarez has held epidemiology positions with the Oklahoma Tribal Epidemiology Center and the Republic of Palau Ministry of Health. Prior to these appointments, she served as Director of Cancer Programs for the Cherokee Nation.



SHANNON EVERS

Ms. Evers graduated with B.S. in Business Administration, Double concentration in marketing and management, University of Oregon, Eugene, Oregon. Extended Education: Certified Fundraising Professional (CFRE) Certificate. Shannon's professional work history includes: Chief Executive Officer, Girl Scouts of Western Oklahoma (September 2012-present); Girl Scouts of Western Washington. Seattle, WA (June 2008-September 2012), Chief Development Officer (November 2011-September 2012), and Vice President of Fund Development (June 2008-November 2011); Girl Scouts-Columbia River Council (Portland, OR) (March 2004-June 2008).



Her awards and activities include: Sunbeam Family Services (Foster parent 2013-present), Rotary Club 29 (2012-present), Oklahoma Afterschool Quality Standards Task Force (2013-present) Oklahoma State Department of Education Character Education Task Force (present), AYSO Soccer Coach (2013-present), YMCA soccer coach (2013), Quail Creek Elementary School Parent/PTA Volunteer (2012-present), Willamette Valley Development Officers Crystal Award "Starbright Professional Award" (2006) Willamette Valley Development Officers Crystal Award "Outstanding Event of the Year" (2003), Tacoma 8 Rotary (2009-2012), Association of Fundraising Professionals (2009-present), Emergency Food Network, (2009-2012), Children's Store Merchandising Chair (2003- 2006).

JOHN FEAVER, PHD

John H. Feaver was born in Berea, Kentucky. His family moved to Norman, Oklahoma, in 1951. His father taught philosophy and religion at the University of Oklahoma for many years. Feaver graduated from Norman High School in 1961. He attended OU from 1961-1968 earning B.A. and M.A. degrees in history and political science. Following military service and Vietnam where he was awarded the Bronze Star, Feaver returned to



pursue doctoral work at OU. Teaching for several years as a member of the faculty at OU, he received his doctorate in history and political science in 1980.

In that same year, he joined the faculty at the University of Science and Arts of Oklahoma in Chickasha. Active in the classroom for the next 15 years, he was appointed chair of the Division of Business and Social Science in 1985, Assistant to the President in 1987, and Vice President for Academic Affairs in 1988. In the summer of 2000 he was named the college's 12th president, a position he continues to hold.

He is Past Chair of the Council of College Presidents that serves in an advisory role to the Chancellor and the Oklahoma State Regents for Higher Education. He sits on a number of statewide boards to include Creative Oklahoma Inc.; the Oklahoma Academy for State Goals; the Oklahoma Arts Institute; Oklahoma Policy Institute; and the Oklahoma Higher Education Heritage Society. He is past member on the Boards of the Oklahoma Heritage Association, Preservation Oklahoma, Oklahoma Community Institute, and Oklahoma A+Schools. He also sits on the Boards of the Southwest Oklahoma Impact Coalition, Chickasha Economic Development Council, and the Chickasha Historic Preservation Commission. In 2012, he was inducted into the Oklahoma Higher Education Hall of Fame.

He is married to Marilyn Feaver, Executive Director of the Southwest Oklahoma Impact Coalition.

JAN FIGART, MS, RN

Ms. Figart is the associate director and senior planner in maternal and child health at the Community Service Council of Greater Tulsa, Inc. This role includes the development of community collaboratives, staff support for coalitions, program development, grant writing, program evaluation and analysis of community trends.



Ms. Figart's career of 40 years includes an Associate Degree from Tulsa Community College, a bachelor degree from Langston University, a master's degree from the University of Oklahoma, and a doctoral candidate from the University of Phoenix in health administration. Her focus has always been nursing. However, homogenous her education goals, she has had diverse opportunities in her career as educator at Rogers State University and the University of Phoenix, administrator with Northeast Oklahoma Area Health Education Center and the Margaret Hudson Program and finally, as analyst and advocate with the Community Service Council.

In the last ten years, Ms. Figart has focused her energies on children's issues in the Tulsa community. She has provided leadership to the Tulsa Healthy Start Initiative, early childhood initiatives and services for the uninsured.

Ms. Figart's accomplishments have been acknowledged by Sigma Theta Tau, Zeta Delta Chapter with a Nursing Leadership Award; Tulsa Community College with a Best of TCC Alumni Award; University of Phoenix with the Faculty of the Year Award; and the American Red Cross with a Humanitarian Award.

DAVID GAHN, MD, MPH, FACOG

Captain Gahn is a board certified Ob/Gyn physician at Cherokee Nation Hastings Hospital and Surveillance Coordinator for Cherokee Nation Public Health. His surveillance activities focus on morbidity and mortality from chronic diseases and maternal child health.



Greene attended the University of Oklahoma on an athletic scholarship where he was a record setting hurdler. His holds a bachelor's degree in industrial engineering.

He and wife Debby live in Norman, Okla. They are the proud parents of son Jess and daughter Sarah Beth.

CHARLES GRIM, DDS

Dr. Grim is the Deputy Director for Health Services for the Cherokee Nation. As Deputy Director for Health Services, Dr. Grim serves as the second line executive in charge of a health system that includes the Cherokee Nation 60 bed W.W. Hastings Hospital (CNWWH), eight outpatient health centers, an EMS service, finance and billing services, facilities management, Jack Brown Youth Regional Treatment Center and a host of public health and community health services and programs. Prior to joining the Cherokee Nation Health Services leadership,



JJEFF HACKLER, JD, MBA

eff Hackler is the Interim Chair of the Department of Rural Health for the OSU Center for Rural Health. In this capacity, Mr. Hackler is responsible for supervising the Oklahoma Office of Rural Health, the Osteopathic Medical Education Consortium of Oklahoma (OMECO), Rural Medical Education, Rural Research and Evaluation, and OSU TeleHealth. Mr. Hackler develops grant proposals and oversees grant management and compliance for the OSU Center for Rural Health. Mr. Hackler is a member of the board of directors for OMECO, the Rural Health Association of Oklahoma (Treasurer), the Foundation for Tulsa Schools, and the Tulsa Federal Credit Union (Treasurer).



Dr. Grim was appointed by President George W. Bush and received unanimous Senate confirmation as the Director of the Indian Health Service (IHS). Dr. Grim administered the nationwide multi-billion dollar health care delivery program from August 2002 until September 2007.

Mr. Hackler has been with the OSU Center for Rural Health since 2002. Mr. Hackler has served as a grant reviewer for the Department of Health and Human Services since 2003. Prior to joining OSU, Mr. Hackler was the Director of Planning and Development at Community Action Project of Tulsa County (CAPTC) where he was responsible for grant development and compliance. He also supervised the Health Clinic, Literacy Lab, and Social Services Program. Prior to joining CAPTC, Mr. Hackler practiced as a transactional attorney in the fields of contracts, real estate, and taxation. Mr. Hackler remains a member of the Oklahoma Bar Association.

MELISSA GOWER

Melissa Gower is a Health Policy Analyst for the Oklahoma City Area Intertribal Health Board working primarily on the Special Protections and Provisions for American Indians in the Affordable Care Act. She also works as a Senior Health Consultant with various tribes, tribal organizations, and non-profit organizations.



Mr. Hackler received his Juris Doctorate degree and Masters in Business Administration from the University of Oklahoma in 1998. Mr. Hackler received his Bachelor of Arts in Economics from Tulane University in New Orleans, Louisiana in 1993.

JEFFREY C. GREENE

Mr. Greene is a president and CEO, an inventor, entrepreneur and a leader in transforming health care. From 2005 to 2009, he was the recipient of the Innovator of the Year award an unprecedented 4 of 5 years. He is well known for his passionate call to improve health care delivery and promote healthiness in constructive ways that draw on positive incentives, behavioral science, free-market principles, and good old commonsense.



JEFF HAMILTON

Jeff Hamilton is currently serving his 17th year as associate minister of historic First Christian Church, Oklahoma City, OK. He is an ordained minister of the Christian Church (Disciples of Christ). He is a graduate of Phillips University, Enid, OK and Yale University Divinity School, New Haven, Conn. He has also done post graduate studies at St. Andrews University, St. Andrews, Scotland. He served as a college chaplain in the eastern United States during the 1960's. He also ministered to students who were wounded at the Kent State shootings in 1970.



Greene developed his passion for public health from his experiences as the founder of a business that grew to become self-insured. This business, CompONE Services, happened to be one the leading medical practice management and billing firms in the country. While CompONE grew, Greene also taught practice management to residents at the University of Oklahoma Health Science Center. This gave Greene a unique vantage of the health and healthcare crises from the perspectives of providers who were his clients and students, consumers who were his employees and his family, and the insurer on behave of his self-insured business.

Jeff served in the Oklahoma House of Representatives from 1986 through 1994. He was recognized for his leadership in issues related to health and mental health, domestic violence, education, at risk youth and international development. He served as chairman of the Oklahoma County Democratic Party from 1995-2003. Jeff also served as chairman of the SKIL Advisory Board for Homeless High School Students through Youth Services for Oklahoma County.

At the present time he is Legislative Chair for the Interfaith Alliance Foundation of Oklahoma, which he served as President from 2004 to 2012. He also serves as Chair of the Steering Committee of the statewide coalition, the Oklahoma Health Equity Campaign and the advisory board of the Injury Prevention Services of the Oklahoma State Department of Health

SUZY HARRINGTON, DNP, RN, MCHES

Demonstrating Oklahoma State University's strong commitment to health and wellness, Dr. Suzy Harrington became the nation's first fully dedicated university Chief Wellness Officer in October 2014. OSU is America's Healthiest Campus® and she is leading the charge system-wide across OSU's ten affiliate campuses and 77 County Extension offices as OSU strives to improve the total health of students, employees and its communities. As a land-grant university, OSU is committed to sharing its wellness successes and knowledge with the citizens of Oklahoma.



Dr. Harrington came to Oklahoma State University from the American Nurses Association, where she was the Director of Health, Safety, and Wellness. There she led the development in national inter-professional standards and built the national Healthy Nurse program, becoming a nationally recognized expert and spokesperson, quoted in USA Today and ABC News.

Since her arrival, she has been busy advancing the OSU culture of wellness as America's Healthiest Campus® leading and aligning goals and resources, locally, statewide, and nationally. Dr. Harrington has been a leader in a variety of health related roles including the National Committee of Quality Assurance's (NCQA) Director of Customer Resources in which she spoke nationally on health care quality topics to include health reform and Patient Centered Medical Home.

Dr. Harrington concentrated her Rush University Doctorate of Nursing Practice in healthcare business and management, and health promotion, earning the College of Nursing Dean's Award and the Rush Nurse Alumni Association Award. She received her Certified Health Education Specialist (CHES) in 2001 after graduating with her Master of Science in Health Sciences, and was one of the first to receive her master's certification, or MCHES in 2011. Her baccalaureate in nursing is from Angelo State University in San Angelo, Texas.

DIANA HARTLEY

Diana Hartley grew up in the small town of Cushing and lived on land claimed by her great-grandparents in the Oklahoma Land Run. She is a proud resident of Norman and graduated with bachelors and master's degrees in public relations from the University of Oklahoma.



She spent the first few years of her career working in journalism as a newspaper reporter and photographer, and then worked for 18 years in school and community public relations. She began working with Sarkeys Foundation in

2006 and made the decision to leave at the end of 2013 to become the executive director of the Oklahoma Women's Coalition. She also teaches as an adjunct professor in the nonprofit management program at OU and consults with nonprofits across the state.

Diana is a graduate of Leadership Oklahoma Class XXIV, a graduate of the 1999 Leadership Norman class, co-chair of Tomorrow's Leaders in 2000, and she served as the Leadership Development co-chair for the three Chamber leadership programs from 2004-2008, and from 2011 to 2014. Diana is president of the board of the Norman Public School Foundation and past president of the board of Bridges, a nonprofit providing educational support to homeless high school students. Her husband, Tim, works in corporate communications for Devon Energy and they have two young adult children.

STANLEY F. HUPFELD

Stanley Hupfeld became President and Chief Executive Officer of Oklahoma Healthcare Corporation and its subsidiaries, including Baptist Medical Center of Oklahoma, on March 30, 1987. In 1995 Hupfeld led the merger of Baptist Medical Center, Southwest Medical Center, and Baptist Healthcare of Oklahoma to form INTEGRIS Health, an integrated delivery system comprising 13 hospitals, all in Oklahoma. Annual net revenues of the System are well over \$1.6 billion with 1,800+ beds. After 23 years as President and Chief Executive Officer of INTEGRIS Health he transitioned effective January 1, 2010 to Chairman of the INTEGRIS Family of Foundations. Prior to his career with INTEGRIS Health, Mr. Hupfeld served as President of All Saints Healthcare in Fort Worth, Texas for ten years. He served in the U.S. Army in Vietnam from 1968 to 1970.



Hupfeld is a native of Dallas, Texas, with an undergraduate degree in History from the University of Texas in Austin, and a Masters of Science in Healthcare Administration from Trinity University. He has been honored by Trinity University as an outstanding graduate. Hupfeld was a member of the 1963 National Championship Football Team at the University of Texas.

He has served as a trustee on the national VHA and AHA Board of Directors, and serves on numerous other Boards and commissions in Oklahoma. He has an extensive speaking background, and has been widely published. He was honored in 2007 with one of the American Hospital Association's highest honors, The Award of Honor, and is also the recipient of the Friends of Nursing Award from the Oklahoma Nurses Association, the CEO Marketer of the Year award from the American Society for Healthcare Planning and Marketing, and the Executive of the Year award from the Sales & Marketing Executives International.

As the driving force of the nation's first hospital-sponsored charter school, Hupfeld was honored in 2009 when the INTEGRIS Health Board of Directors voted to rename the school The Stanley Hupfeld Academy at Western Village. He currently writes a healthcare column for a local business daily, The Journal Record, and published his first book, "Political Malpractice – How the Politicians Made a Mess of Health Reform," in 2012.

MARY ELLEN JONES

Mary Ellen Jones is the parent of an adult son with schizophrenia and a retired School Psychologist. She is a volunteer educator, support group facilitator, and mental health advocate with the National Alliance on Mental Illness (NAMI).



DAVID KENDRICK, MD, MPH

Dr. David Kendrick, board certified in internal medicine, is the principle investigator and CEO of the MyHealth Access Network, a Beacon Community. MyHealth is focused on improving health in Oklahoma and beyond by implementing a community-wide infrastructure for healthcare IT. MyHealth is also focused on providing advanced health information exchange, community-wide care coordination tools, and a robust decision support platform to support providers striving to provide high quality care in the face of overwhelming data availability. An advanced community health analytics platform has been implemented to enable evaluation and improvement of population health across the community and region.



Dr. Kendrick also serves at the University's Health Sciences Center as the Chair of the Department of Community Medical Informatics, and Clinical Associate Professor of Medical Informatics. In addition, he is the Assistant Provost for Strategic Planning; in this capacity, he is charged with defining and implementing healthcare information systems strategy for the SOCM and the community it serves. In particular, Dr. Kendrick is developing systems required to support patient-centered medical homes and to connect them with one another in ways that measurably improve the lives of patients and ultimately the health and quality of life of the entire community. In addition, Dr. Kendrick is an associate professor of internal medicine and pediatrics and holds the Kaiser Chair of Community Medicine at the University of Oklahoma's School of Community Medicine (SOCM). He is also a member of the Board of Directors of NCQA (National Committee for Quality Assurance), and convening faculty for the CPCi (Comprehensive Primary Care Initiative).

CRAIG KNUTSON

Craig was born and raised in Washington State but graduated from Tulsa Memorial HS. He received his bachelors ('73) and masters ('75) degrees from the University of Oklahoma. His 40 year career path includes work as a senior transportation planner/economic planner in both Tulsa and Oklahoma City, chief economist for SWBT/SBC, President of e-Conographic Consulting Services, and chief of staff at both the Oklahoma Insurance Department and Oklahoma City University.



He is the proud father of three grown adults (34-39), grandfather of two granddaughters (5 & 10), one grandson (6 months old), and the grateful husband of Julie, his wife of 17 years later this month. In addition to his family, his passions include teaching Junior Achievement at the high school level (23 years and growing), red blood cells/plasma donor for OBI (16+ gallons and growing), and contemporary jazz.

TERRANCE KOMINSKY, PHD

Terrence K. Kominsky, Ph.D. is an early career scientist. He is currently the Coordinator for Behavioral Health Research & Evaluation for Cherokee Nation Behavioral Health. He has Master of Science in Experimental Psychology and a PhD in Lifespan Developmental Psychology both of which were completed at Oklahoma State University.



CHAD LANDGRAF

Beginning in 1996, Mr. Landgraf worked as an environmental research assistant at the U.S. EPA's Robert S. Kerr Environmental Research Laboratory in Ada, Oklahoma where he developed and maintained geospatial databases for select Superfund sites.



Between 1998 and 2002, Mr. Landgraf worked at the University of Alabama's Cartographic Research Laboratory as a research assistant while he completed a master's degree in geography. Mr. Landgraf's responsibilities included custom cartographic and graphic production and design and instructional support for undergraduate geography courses. From 2002 to 2005, Mr. Landgraf was employed as a geographic information systems (GIS) analyst at the University of Alabama at Birmingham's Center for the Advancement of Youth Health.

Mr. Landgraf returned to Oklahoma in 2005 to serve as a GIS specialist at the OSU Center for Rural Health. At the Center, he has developed cartographic and other data products that have been used by OSU staff and other policy makers to advance health care in rural Oklahoma. Currently, he is the co-chair of the Oklahoma Health Improvement Plan's workforce data subcommittee. Mr. Landgraf also serves on the adjunct faculty at Tulsa Community College where he teaches computer cartography and GIS courses.

MAC MCCRORY, EDD

Mac McCrory, Ed.D. Executive Director, Schools for Healthy Lifestyles, former Spence Professor and Director, Seretean Wellness Center, Oklahoma State University.



KAITLYN MacGREGOR

Kaitlyn MacGregor joined HealthCorps in the summer of 2012 as the West Coast Communications Manager. HealthCorps is a 501 (c) 3 founded in 2003 by heart surgeon and Daytime Emmy Award-winning host Dr. Mehmet Oz and his wife Lisa to combat the childhood obesity crisis. Prior to HealthCorps Kaitlyn interned at Mercury Public Affairs and Sacramento's Child Abuse Prevention Center.



Her areas of experience are in non-profit communications, marketing and event planning. Kaitlyn has a bachelor's degree in journalism with an option in public relations from California State University, Chico.

MARSHAN MARICK, MPH

Marshan Marick, MPH, CHES is an Instructor and Director of the Public Health undergraduate program at Langston University. Responsible for instruction, advisement and recruitment, Mrs. Marick is continually looking for ways to place public health in the forefront of the communities in which she serves. She is involved in various facets of public health in an effort to facilitate change. As a certified health education specialist, she has had the privilege of serving the residents of Oklahoma for over ten years.



Her experiences as a health educator have afforded her the opportunity to increase awareness and support behavior change related to chronic disease management. Witnessing the continual gaps in health outcomes has motivated her to identify additional ways in which she can make a tangible difference in the health of the community. She serves as a member of the Southwest Regional Health Equity Council. Recently, she has joined the Steering Committee of the Oklahoma Health Equity Campaign.

THOMAS MARTINDALE

Since 2011 Tom has been directing the City of Muskogee Anti-Poverty Initiative, Building Bridges for the Future of Muskogee. In this role he helps Muskogee citizens understand the complexities of poverty and what individuals and organizations can do to address barriers facing those trying to get ahead. Tom is the former Executive Director for MONARCH Inc, a private drug and alcohol addiction treatment center for women, located in Muskogee.

A former United States Marine Corps test pilot, he received his undergraduate degree in Management from the University of Redlands and MBA coursework from Pepperdine University. His varied roles include: Senior Director of Employee Development for a large Fortune 300 corporation, Early Head Start/Head Start Director for southeastern Oklahoma and Operations Director of a large Community Mental Health organization.

ALICIA MEADOWS, MPH, MBA

Alicia is the Director of Planning and Development for the Oklahoma City-County Health Department, where she led the agency efforts to become one of the first nationally accredited health departments. She has served in leadership roles at both local metro health departments in Oklahoma. She holds an MPH from the University of Oklahoma, and an MBA from Oklahoma State University. She is also a consultant for the Public Health Foundation providing change management, quality improvement, strategic planning and facilitation support for healthcare organizations in public and private sectors.



ELIZABETH MONTGOMERY-ANDERSON

Elizabeth Montgomery-Anderson, GISP is a GIS Analyst for Cherokee Nation GeoData. Elizabeth received a Master of Arts in Geography from the University of Kansas and has been working at Cherokee Nation since 2007.



CARI OGDEN, MBA

Cari Ogden is the Vice President of Community Initiatives at the Regional Food Bank of Oklahoma. Ogden began her career in the for-profit sector after graduating with a degree in Business Administration and Marketing.



In 1992 she moved to New York to work for a non-profit agency serving victims of the Chernobyl nuclear accident in Belarus. Her work with children affected by Chernobyl then led to more than 20 years of service in the non-profit sector.

Ogden has lived and worked in places as diverse as Switzerland, Bulgaria and South Africa, and has participated in project teams working in Belarus, Armenia, Romania and Kenya. For six years she was a Corporate Relations Officer for World Vision, an international relief and development organization, procuring Gifts-in-Kind donations from U.S. corporations. From 2004-2010 Ogden worked for the Oklahoma Dental Foundation as the Deputy Executive Director, where she founded the Mobile Dental Care Program, coordinating dental care for underserved children throughout Oklahoma.

Ogden earned her MBA from Arizona State University and is an adjunct instructor at Southern Nazarene University, teaching courses in Organizational Behavior, Human Resources and Technical Writing. She served as a Loaned Executive for the 2010 United Way of Central Oklahoma Workplace Campaign and currently volunteers as the President of the Board of Directors for a non-profit agency promoting accessible recreation for individuals living with a mental or physical disability.

MICHAEL PEERCY, MPH

Michael Peercy, MPH is an epidemiologist with the Division of Research and Population Health at the Chickasaw Nation. He has worked for the Chickasaw Nation for 18 years in various roles in the Department of Health. His research interests include geoanalysis of medical data, and the impact of climate change on health.



CARLY PUTNAM

Carly joined OK Policy as a full-time policy analyst in January of 2014. She previously worked as an OK Policy intern. A Kansas City native, Carly graduated from the University of Tulsa in December 2013 with a BA in Sociology and Women's and Gender Studies. She was a leader in several TU organizations active in feminist, LGBTQ, and anti-racist education and advocacy.



She is a graduate of the National Education of Women (NEW) Leadership Institute, worked as an editor for the campus newspaper, tutored students at Will Rogers High School, and interned with Planned Parenthood. Her work at OK Policy focuses on healthcare, poverty, inequality, and race and gender.

ANNE ROBERTS

Anne Roberts served as the Executive Director of the Oklahoma Institute for Child Advocacy for 20 years, raising awareness about the needs of children and striving for positive state-level policy changes to address those needs. In 2006, she brought the ACEs study from California to Oklahoma, providing a dramatic portrayal of the long-term health effects of childhood trauma. She is now the Director of Legislative Affairs for INTEGRIS Health, Oklahoma’s largest health care system.



DENNA WHEELER, PHD

Denna is currently the Director of Rural Research and Evaluation and Clinical Assistant Professor of Rural Health for Oklahoma State University Center for Health Sciences, Center for Rural Health and Adjunct Assistant Professor of quantitative methods and program evaluation in the School of Educational Studies, OSU College of Education. She earned a Ph.D. in Educational Psychology with an emphasis in research and evaluation. In her work for the Center for Rural Health she directs program evaluation activities for several grant funded programs and provides analytical support to a variety of collaborative inter-disciplinary research projects. She has authored or co-authored more than 20 peer reviewed publications and presentations. Her current research interests include rural physician workforce recruitment, preparation, and retention and exploring moderators and mediators of the relationship between health literacy and health outcomes.



GREGORY A. SHINN, MSW

Gregory A. Shinn, MSW, began his social work career in 1988 on the Bowery in Manhattan, where he worked in homeless shelters and performed street outreach in subways, parks and flophouses. Greg received his master’s degree in clinical social work from New York University in 1993. Since then, Greg has worked in a variety of settings, including state psychiatric hospitals, outpatient clinics and home-based programs.



TERRI WHITE, MSW

Terri White, commissioner for the Oklahoma Department of Mental Health and Substance Abuse Services, serves as the CEO for one of Oklahoma’s largest state agencies. She is a passionate advocate for individuals experiencing mental illness and addiction. Because of her leadership, ODMHSAS has become nationally known for its children’s behavioral health services; community-based treatment programs; technological innovations such as “telepsychiatry;” and the integration of behavioral health care into primary healthcare settings.



From 1993 to 2001, Greg served as the Director of Social Services for the John Heuss House, a shelter for the homeless mentally ill in lower Manhattan’s financial district. In 2001, Greg relocated to Oklahoma to serve as Associate Director of Mental Health Association Oklahoma (the Association). The Association is a statewide organization advocating for Oklahomans impacted by mental illness and homelessness.

JOHN TANKARD

John Tankard is a Planner 1 with the City of Oklahoma City Planning Department focusing on public health, especially access to parks and recreation, access to healthy foods, Complete Streets, and health impact assessments. John holds a Bachelor’s of Science in Architecture from the Georgia Institute of Technology and a Master’s of Environmental Planning & Design from the University of Georgia.



White was also the first woman to be appointed as Oklahoma Secretary of Health, serving in that capacity for then Governor Brad Henry, from 2009 to 2011. She has been recognized by The Journal Record newspaper as one of Oklahoma’s top “Achievers Under 40” and is a three-time honoree of The Journal Record’s “50 Women Making a Difference.” In 2014, White received the “Kate Barnard Award” from the Oklahoma Commission on the Status of Women, an award created to honor women who have made a difference in Oklahoma through public service. In 2011, she was inducted into The Anne and Henry Zarrow School of Social Work Hall of Fame at the University of Oklahoma, where she received both her Master of Social Work and her Bachelor of Arts in Social Work.

RICHARD WANSLEY, PHD

Dr. Richard Wansley is a professor at the Oklahoma State University Center for Health Sciences (OSU CHS) in Tulsa, and formerly served as OSU CHS Vice President. He is trained as a neuropsychologist (PhD, University of Oklahoma Health Sciences Center) and health care policy researcher and advocate (Fellowship, University of Illinois in Chicago). Dr. Wansley is the chairperson of the Mental Health Association Oklahoma’s Public Policy Committee. He is also a member of the Executive Committee for the Board of Directors – Oklahoma Academy, and leads the Academy’s policy interests in reforming Oklahoma’s criminal justice system. Dr. Wansley has published hundreds of articles and opinions in his professional career, and been the recipient of numerous awards for his scholarly and public works as well as policy leadership efforts.



BRENT WILBORN

As Director of Public Policy for the statewide membership association of community health centers and other primary care safety net providers, Brent is responsible for analyzing policy changes and their effects on community health centers, serving as government liaison, and working to increasing primary care access for all Oklahomans. Coming to OKPCA in October 2003, Brent formerly served as an Assistant Extension Specialist in the area of rural development and health care with the Oklahoma Cooperative Extension Service. Brent earned both a Bachelor of Science degree in Agribusiness and a Master of Science degree in Agricultural Economics from Oklahoma State University.



Preamble

WE CAN DO BETTER

Certain Unalienable Rights

Steven Prescott, MD, Co-Chairman 2014 Town Hall

Words from the Declaration of Independence came to mind as I wrote this piece over the Fourth of July weekend: "... life, liberty, and the pursuit of happiness." It's the last bit that fits here since good health (physical and mental) is an essential element of happiness. Of course life and liberty also depend in some measure on good health individually and collectively.

So I believe that good health is one of our rights. Now does this mean that we are guaranteed good health? No, we have to work at it, but we should have access to tools that help us with the job.

With this Town Hall we hope to begin a vigorous discussion on how we in Oklahoma can do better to improve our health.

A core issue is how to overcome the powerful negative effect that poverty has on health since Oklahoma certainly has more than its share of poverty. But this isn't the whole answer since neighboring states that are just as poor have seen better health outcomes over the past few decades.

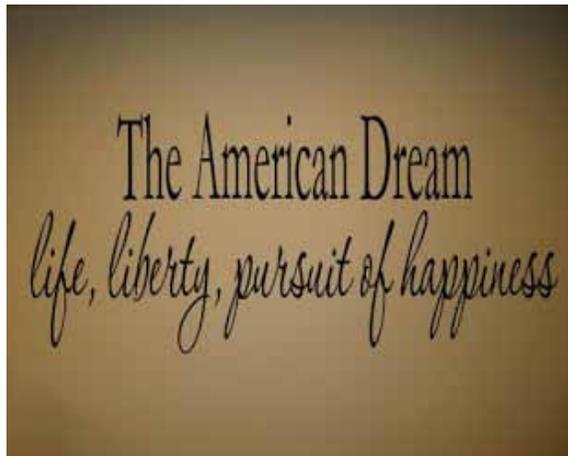
I believe that we are suffering from poverty of goals and actions and it is these shortcomings that should command our attention. Why do people make bad decisions that affect their health adversely—to smoke, to eat too much and exercise

too little, to drink alcohol to excess, to use illicit drugs, and to not comply with medical treatment?

Often the bad decision results from a mismatch of timing since the bad behavior is pleasurable in the short run: I'll have a few beers, some chips and dip, and watch the game on TV versus eat some nuts, drink a glass of water and take a brisk walk.

Conversely, the negative consequences of the behavior (obesity, diabetes, arthritis) are years away. We all make bad decisions when the short-term result is pleasure. We need new ideas, mechanisms, and incentives that will help balance the scales by giving more weight to the future.

This Town Hall also needs to address the challenges of caring for patients who already are suffering from illnesses irrespective of the cause. Yes, let's work on better ways to avoid disease in the future, but not at the expense of abandoning people who need help now. These patients should have access to a capable, caring team and well-equipped facilities.



What can we do to realize this vision?

There are exciting ideas about how to improve healthcare in Oklahoma that are being tested now and these will be shared, debated, and perhaps copied as a result of the days we will spend in Sulphur.

The Power of Attitude

Kay Goebel, PhD, Co-Chairman 2014 Town Hall

Welcome to this year's Town Hall on Health in Oklahoma. We hope you will be enlightened, enriched and enthused after your experience and will be ready to become Oklahoma Ambassadors for Good Health in Oklahoma.

We will be looking at the various problems we have in our state and will work to find some solutions. Information will be given on the positive steps that are being taken by businesses and organizations to assist in making Oklahoma a better place to live. Something I would like all of us to consider is what we can do as individuals to become healthier.

First of all we can make sure we are doing all we can to be healthy mentally and physically. I am going to share some research backed information that was published in the June, 2009 issue of Consumers Reports on Health. These tips can assist you in becoming happier and healthier. Count on the Positive... people who focused on the positive had a greater sense of well-being in several studies conducted at the University of Miami and the University of California, Davis.

Being thankful also helps in having a better mood. Make Friends...Several studies have shown that chronic loneliness is associated with higher rates of blood pressure, inactivity, smoking, and stress. Volunteer...donating time to good causes results in a greater sense of optimism and sociability. Participants at the Town Hall are already on that track. People who focus on the present have less anxiety. Brain scans show greater activity in the region associated with happiness when they attend

to being mindful of the here and now. Being physically active and exercising regularly gives one a sense of control and can ease stress and depression. Laugh...this may reduce stress, help maintain a healthy immune system and improve arterial blood flow. There is a strong connection between our state of mind and our physical health. Many long term studies of older adults who are healthy and resilient find that their attitude about life is a key ingredient to their successful later years. I want to share with you something I found years ago by an anonymous author.

“The longer I live, the more I realize the impact of attitude on life. Attitude is more important than facts. It looms today as more important than the past, than education, than money, than circumstances, than failure, than successes, {than

that what other people think or say or do}. It is more important than appearance, giftedness or skill. it will make or break a company...a church...a temple...a nation...a community...a home...a relationship

ATTITUDE
is everything

The remarkable thing is that we have a choice every day regarding the attitude we will embrace for that day. We cannot change the inevitable.. the only thing we can do is play on the one strength we have, and that is our attitude. I am convinced that life is 10 percent what happens to me and 90 percent how I react to it. And so it is with you...We are in charge of our attitude. “

So be engaged, active and involved in the Town Hall and enjoy the experience.

The 2007 Shattuck Lecture

Steve Shroeder, MD, Distinguished Professor of Health and Health Care, UCSF, San Francisco

The United States spends more on health care than any other nation in the world, yet it ranks poorly on nearly every measure of health status. How can this be? What explains this apparent paradox?

The two-part answer is deceptively simple - first, the pathways to better health do not generally depend on better health care, and second, even in those instances in which health care is important, too many Americans do not receive it, receive it too late, or receive poor-quality care.

In this lecture, I first summarize where the United States stands in international rankings of health status. Next, using the concept of determinants of premature death as a key measure of health status, I discuss pathways to improvement, emphasizing lessons learned from tobacco control and acknowledging the reality that better health (lower mortality and a higher level of functioning) cannot be achieved without paying greater attention to poor Americans. I conclude with speculations on why we have not focused on improving health in the United States and what it would take to make that happen.

HEALTH STATUS OF AMERICANS

Among the 30 developed nations that make up the Organization for Economic Cooperation and Development (OECD), the United States ranks near the bottom on most standard measures of health status (Table 1).¹⁻⁴ (One measure on which the United States does better is life expectancy from the age of 65 years, possibly reflecting the comprehensive health insurance provided for this segment of the population.) Among the 192 nations for which 2004 data are available, the United States ranks 46th in average life expectancy from birth and 42nd in infant mortality.^{5,6}

It is remarkable how complacent the public and the medical profession are in their acceptance of these unfavorable comparisons, especially in light of how carefully we track health-systems measures,

such as the size of the budget for the National Institutes of Health, trends in national spending on health, and the number of Americans who lack health insurance. One reason for the complacency may be the rationalization that the United States is more ethnically heterogeneous than the nations at the top of the rankings, such as Japan, Switzerland, and Iceland.

It is true that within the United States there are large disparities in health status - by geographic area, race and ethnic group, and class.⁷⁻⁹ But even when comparisons are limited to white Americans, our performance is dismal (Table 1 - omitted from this article). And even if the health status of white Americans matched that in the leading nations, it would still be incumbent on us to improve the health of the entire nation.

PATHWAYS TO IMPROVING HEALTH

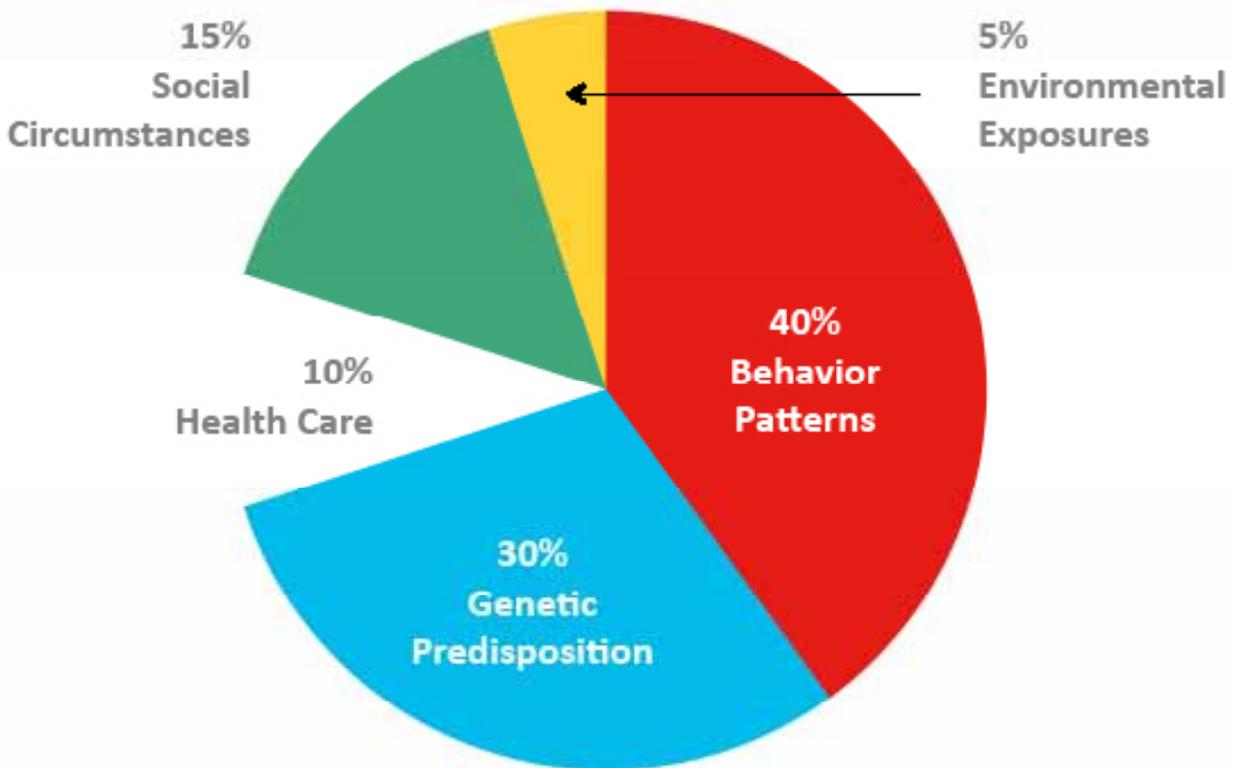
Health is influenced by factors in five domains - genetics, social circumstances, environmental exposures, behavioral patterns, and health care (Fig. 1).^{10,11} When it comes to reducing early deaths, medical care has a relatively minor role. Even if the entire U.S. population had access to excellent medical care - which it does not - only a small fraction of these deaths could be prevented.

The single greatest opportunity to improve health and reduce premature deaths lies in personal behavior. In fact, behavioral causes account for nearly 40% of all deaths in the United States.¹² Although there has been disagreement over the actual number of deaths that can be attributed to obesity and physical inactivity combined, it is clear that this pair of factors and smoking are the top two behavioral causes of premature death (Fig. 2 - omitted from this article).¹²

Addressing Unhealthy Behavior

Clinicians and policymakers may question whether behavior is susceptible to change or whether attempts to change behavior lie outside

Figure 1
The Determinants of Health and
Their Estimated Proportional Contribution to Premature Death



“The single greatest opportunity to improve health and reduce premature deaths lies in personal behavior. In fact, behavioral causes account for nearly 40% of all deaths in the United States”.¹²

“The largest potential for further improvement in population health lies in behavioral risk factors, especially smoking and obesity.”

the province of traditional medical care.¹³ They may expect future successes to follow the pattern where- by immunization and antibiotics improved health in the 20th century. If the public's health is to improve, however, that improvement is more likely to come from behavioral change than from technological innovation. Experience demonstrates that it is in fact possible to change behavior, as illustrated by increased seat-belt use and decreased consumption of products high in saturated fat. The case of tobacco best demonstrates how rapidly positive behavioral change can occur.

The Case of Tobacco

The prevalence of smoking in the United States declined among men from 57% in 1955 to 23% in 2005 and among women from 34% in 1965 to 18% in 2005.^{14,15} Why did tobacco use fall so rapidly? The 1964 report of the surgeon general, which linked smoking and lung cancer, was followed by multiple reports connecting active and passive smoking to myriad other diseases. Early antismoking advocates, initially isolated, became emboldened by the cascade of scientific evidence, especially with respect to the risk of exposure to secondhand smoke.

Counter-marketing - first in the 1960s and more recently by several states and the American Legacy Foundation's "truth®" campaign - linked the creativity of Madison Avenue with messages about the duplicity of the tobacco industry to produce compelling antismoking messages¹⁶ (an antismoking advertisement is available with the full text of this article at www.nejm.org).

Laws, regulations, and litigation, particularly at the state and community levels, led to smoke-free public places and increases in the tax on cigarettes - two of the strongest evidence- based tobacco-control measures.^{14,17,18} In this regard, local governments have been far ahead of the federal government, and they have inspired European countries such as Ireland and the United Kingdom to make public places smoke-free.^{14,19} In addition, new medications have augmented face-to-face and telephone counseling techniques to increase the odds that clinicians can help smokers quit.^{15,20,21}

It is tempting to be lulled by this progress and shift attention to other problems, such as the obesity epidemic. But there are still 44.5 million smokers in the United States, and each year tobacco use kills 435,000 Americans, who die up to 15 years earlier than nonsmokers and who often spend their final years ravaged by dyspnea and pain.^{14,20} In addition, smoking among pregnant women is a major contributor to premature births and infant mortality.²⁰ Smoking is increasingly concentrated in the lower socioeconomic classes and among those with mental illness or problems with substance abuse.^{15,22,23}

People with chronic mental illness die an average of 25 years earlier than others, and a large percentage of those years are lost because of smoking.²⁴ Estimates from the Smoking Cessation Leadership Center at the University of California at San Francisco, which are based on the high rates and intensity (number of cigarettes per day plus the degree to which each is finished) of tobacco use in these populations, indicate that as many as 200,000 of the 435,000 Americans who die prematurely each year from tobacco-related deaths are people with chronic mental illness, substance-abuse problems, or both.^{22,25}

Understanding why they smoke and how to help them quit should be a key national research priority. Given the effects of smoking on health, the relative inattention to tobacco by those federal and state agencies charged with protecting the public health is baffling and disappointing.

The United States is approaching a "tobacco tipping point" - a state of greatly reduced smoking prevalence. There are already low rates of smoking in some segments of the population, including physicians (about 2%), people with a postgraduate education (8%), and residents of the states of Utah (11%) and California (14%).²⁵

When Kaiser Permanente of northern California implemented a multisystem approach to help smokers quit, the smoking rate dropped from 12.2% to 9.2% in just 3 years.²⁵ Two basic strategies would enable the United States to meet

its Healthy People 2010 tobacco-use objective of 12% population prevalence: keep young people from starting to smoke and help smokers quit. Of the two strategies, smoking cessation has by far the larger short-term impact. Of the current 44.5 million smokers, 70% claim they would like to quit.²⁰ Assuming that one half of those 31 million potential non-smokers will die because of smoking, that translates into 15.5 million potentially preventable pre-mature deaths.^{20,26} Merely increasing the baseline quit rate from the current 2.5% of smokers to 10% - a rate seen in placebo groups in most published trials of the new cessation drugs - would prevent 1,170,000 premature deaths. No other medical or public health intervention approaches this degree of impact. And we already have the tools to accomplish it.^{14,27}

Is Obesity the Next Tobacco?

Although there is still much to do in tobacco control, it is nevertheless touted as a model for combating obesity, the other major, potentially preventable cause of death and disability in the United States. Smoking and obesity share many characteristics (Table 2 - omitted from this article). Both are highly prevalent, start in childhood or adolescence, were relatively uncommon until the first (smoking) or second (obesity) half of the 20th century, are major risk factors for chronic disease, involve intensively marketed products, are more common in low socioeconomic classes, exhibit major regional variations (with higher rates in southern and poorer states), carry a stigma, are difficult to treat, and are less enthusiastically embraced by clinicians than other risk factors for medical conditions.

Nonetheless, obesity differs from smoking in many ways (Table 2). The binary definition of smoking status (smoker or nonsmoker) does not apply to obesity. Body-mass index, the most widely used measure of obesity, misclassifies as overweight people who have large muscle mass, such as California governor Arnold Schwarzenegger. It is not biologically possible to stop eating, and unlike moderate smoking, eating a moderate amount of food is not hazardous. There is no addictive analogue to nicotine in food. Nonsmokers mobilize

against tobacco because they fear injury from secondhand exposure, which is not a peril that attends obesity.

The food industry is less concentrated than the tobacco industry, and although its advertising for children has been criticized as predatory and its ingredient-labeling practices as deceptive, it has yet to fall into the ill repute of the tobacco industry. For these reasons, litigation is a more problematic strategy, and industry payouts - such as the Master Settlement Agreement between the tobacco industry and 46 state attorneys general to recapture the Medicaid costs of treating tobacco-related diseases - are less likely.¹⁴ Finally, except for the invasive option of bariatric surgery, there are even fewer clinical tools available for treating obesity than there are for treating addiction to smoking.

Several changes in policy have been proposed to help combat obesity.²⁸⁻³⁰ Selective taxes and subsidies could be used as incentives to change the foods that are grown, brought to market, and consumed, though the politics involved in designating favored and penalized foods would be fierce.³¹ Restrictions could also apply to the use of food stamps. Given recent data indicating that children see from 27 to 48 food advertisements for each 1 promoting fitness or nutrition, regulations could be put in place to shift that balance or to mandate support for sustained social-marketing efforts such as the “truth®” campaign against smoking.^{16,32} Requiring more accurate labeling of caloric content and ingredients, especially in fast-food outlets, could make customers more aware of what they are eating and induce manufacturers to alter food composition.

Better pharmaceutical products and counseling programs could motivate clinicians to view obesity treatment more enthusiastically. In contrast to these changes in policy, which will require national legislation, regulation, or research investment, change is already under way at the local level. Some schools have banned the sale of soft drinks and now offer more nutritionally balanced lunches. Opportunities for physical activity at work, in school, and in the community have been expanded in a small but growing number of locations.

Nonbehavioral Causes of Premature Death

Improving population health will also require addressing the nonbehavioral determinants of health that we can influence: social, health care, and environmental factors. (To date, we lack tools to change our genes, although behavioral and environmental factors can modify the expression of genetic risks such as obesity.) With respect to social factors, people with lower socioeconomic status die earlier and have more disability than those with higher socioeconomic status, and this pattern holds true in a stepwise fashion from the lowest to the highest classes.³³⁻³⁸ In this context, class is a composite construct of income, total wealth, education, employment, and residential neighborhood. One reason for the class gradient in health is that people in lower classes are more likely to have unhealthy behaviors, in part because of inadequate local food choices and recreational opportunities.

Yet even when behavior is held constant, people in lower classes are less healthy and die earlier than others.³³⁻³⁸ It is likely that the deleterious influence of class on health reflects both absolute and relative material deprivation at the lower end of the spectrum and psychosocial stress along the entire continuum. Unlike the factors of health care and behavior, class has been an “ignored determinant of the nation’s health.”³³

Disparities in health care are of concern to some policymakers and researchers, but because the United States uses race and ethnic group rather than class as the filter through which social differences are analyzed, studies often highlight disparities in the receipt of health care that are based on race and ethnic group rather than on class.

But aren’t class gradients a fixture of all societies? And if so, can they ever be diminished? The fact is that nations differ greatly in their degree of social inequality and that - even in the United States - earning potential and tax policies have fluctuated over time, resulting in a narrowing or widening of class differences. There are ways to address the effects of class on health.³³ More investment could be made in research efforts designed to improve

our understanding of the connection between class and health. More fundamental, however, is the recognition that social policies involving basic aspects of life and well-being (e.g., education, taxation, transportation, and housing) have important health consequences.

Just as the construction of new buildings now requires environmental-impact analyses, taxation policies could be subjected to health-impact analyses. When public policies widen the gap between rich and poor, they may also have a negative effect on population health. One reason the United States does poorly in international health comparisons may be that we value entrepreneurialism over egalitarianism. Our willingness to tolerate large gaps in income, total wealth, educational quality, and housing has unintended health consequences. Until we are willing to confront this reality, our performance on measures of health will suffer.

One nation attempting to address the effects of class on health is the United Kingdom. Its 1998 Acheson Commission, which was charged with reducing health disparities, produced 39 policy recommendations spanning areas such as poverty, income, taxes and benefits, education, employment, housing, environment, transportation, and nutrition.

Only 3 of these 39 recommendations pertained directly to health care: all policies that influence health should be evaluated for their effect on the disparities in health resulting from differences in socioeconomic status; a high priority should be given to the health of families with children; and income inequalities should be reduced and living standards among the poor improved.³⁹ Although implementation of these recommendations has been incomplete, the mere fact of their existence means more attention is paid to the effects of social policies on health. This element is missing in U.S. policy discussions - as is evident from recent deliberations on income-tax policy.

Although inadequate health care accounts for only 10% of premature deaths, among the five determinants of health (Fig. 1), health care receives

by far the greatest share of resources and attention. In the case of heart disease, it is estimated that health care has accounted for half of the 40% decline in mortality over the past two decades.⁴⁰ (It may be that exclusive reliance on international mortality comparisons shortchanges the results of America's health care system. Perhaps the high U.S. rates of medical-technology use translate into comparatively better function. To date, there are no good international comparisons of functional status to test that theory, but if it could be substantiated, there would be an even more compelling claim for expanded health insurance coverage.)

U.S. expenditures on health care in 2006 were an estimated \$2.1 trillion, accounting for 16% of our gross domestic product.⁴¹ Few other countries even reach double digits in health care spending.

There are two basic ways in which health care can affect health status: quality and access. Although qualitative deficiencies in U.S. health care have been widely documented,⁴² there is no evidence that its performance in this dimension is worse than that of other OECD nations. In the area of access, however, we trail nearly all the countries: 45 million U.S. citizens (plus millions of immigrants) lack health insurance, and millions more are seriously underinsured.

Lack of health insurance leads to poor health.⁴³ Not surprisingly, the uninsured are disproportionately represented among the lower socioeconomic classes.

Environmental factors, such as lead paint, polluted air and water, dangerous neighborhoods, and the lack of outlets for physical activity, also contribute to premature death. People with lower socioeconomic status have greater exposure to these health-compromising conditions. As with social determinants of health and health insurance coverage, remedies for environmental risk factors lie predominantly in the political arena.⁴⁴

THE LESS FORTUNATE

Since all the actionable determinants of health - personal behavior, social factors, health care, and the environment - disproportionately affect the poor, strategies to improve national health rankings must focus on this population.

To the extent that the United States has a health strategy, its focus is on the development of new medical technologies and support for basic biomedical research. We already lead the world in the per capita use of most diagnostic and therapeutic medical technologies, and we have recently doubled the budget for the National Institutes of Health.

But these popular achievements are unlikely to improve our relative performance on health. It is arguable that the status quo is an accurate expression of the national political will - a relentless search for better health among the middle and upper classes.

This pursuit is also evident in how we consistently outspend all other countries in the use of alternative medicines and cosmetic surgeries and in how frequently health "cures" and "scares" are featured in the popular media.⁴⁵ The result is that only when the middle class feels threatened by external menaces (e.g., secondhand tobacco smoke, bioterrorism, and airplane exposure to multidrug-resistant tuberculosis) will it embrace public health measures.

In contrast, our investment in improving population health - whether judged on the basis of support for research, insurance coverage, or government-sponsored public health activities - is anemic.⁴⁶⁻⁴⁸

Although the Department of Health and Human Services periodically produces admirable population health goals - most recently, the Healthy People 2010 objectives⁴⁹ - no government department or agency has the responsibility and authority to meet these goals, and the importance of achieving them has yet to penetrate the political process.

WHY DON'T AMERICANS FOCUS ON FACTORS THAT CAN IMPROVE HEALTH?

The comparatively weak health status of the United States stems from two fundamental aspects of its political economy. The first is that the disadvantaged are less well represented in the political sphere here than in most other developed countries, which often have an active labor movement and robust labor parties. Without a strong voice from Americans of low socioeconomic status, citizen health advocacy in the United States coalesces around particular illnesses, such as breast cancer, human immunodeficiency virus infection and the acquired immunodeficiency syndrome (HIV–AIDS), and autism. These efforts are led by middle-class advocates whose lives have been touched by the disease.

There have been a few successful public advocacy campaigns on issues of population health - efforts to ban exposure to secondhand smoke or to curtail drunk driving - but such efforts are relatively uncommon.⁴⁴ Because the biggest gains in population health will come from attention to the less well off, little is likely to change unless they have a political voice and use it to argue for more resources to improve health-related behaviors, reduce social disparities, increase access to health care, and reduce environmental threats. Social advocacy in the United States is also fragmented by our notions of race and class.³³ To the extent that poverty is viewed as an issue of racial injustice, it ignores the many whites who are poor, thereby reducing the ranks of potential advocates.

The relatively limited role of government in the U.S. health care system is the second explanation. Many are familiar with our outlier status as the only developed nation without universal health care coverage.⁵⁰ Less obvious is the dispersed and relatively weak status of the various agencies responsible for population health and the fact that they are so disconnected from the delivery of health services. In addition, the American emphasis on the value of individual responsibility creates a reluctance to intervene in what are seen as personal behavioral choices.

HOW CAN OUR HEALTH IMPROVE?

Given that the political dynamics of the United States are unlikely to change soon and that the less fortunate will continue to have weak representation, are we consigned to a low-tier status when it comes to population health? In my view, there is room for cautious optimism.

One reason is that despite the epidemics of HIV–AIDS and obesity, our population has never been healthier, even though it lags behind so many other countries. The gain has come from improvements in personal behavior (e.g., tobacco control), social and environmental factors (e.g., reduced rates of homicide and motor-vehicle accidents and the introduction of fluoridated water), and medical care (e.g., vaccines and cardiovascular drugs). The largest potential for further improvement in population health lies in behavioral risk factors, especially smoking and obesity.

We already have tools at hand to make progress in tobacco control, and some of these tools are applicable to obesity. Improvement in most of the other factors requires political action, starting with relentless measurement of and focus on actual health status and the actions that could improve it. Inaction means acceptance of America's poor health status.

Improving population health would be more than a statistical accomplishment. It could enhance the productivity of the workforce and boost the national economy, reduce health care expenditures, and most important, improve people's lives. But in the absence of a strong political voice from the less fortunate themselves, it is incumbent on health care professionals, especially physicians, to become champions for population health. This sense of purpose resonates with our deepest professional values and is the reason why many chose medicine as a profession. It is also one of the most productive expressions of patriotism. Americans take great pride in asserting that we are number one in terms of wealth, number of Nobel Prizes, and military strength. Why don't we try to become number one in health?

References: The Shattuck Lecture

This article first appeared in the New England Journal of Medicine, 357;12, pages 1221 - 1228, September 20, 2007.

1. OECD health data 2006 (2001 figures). Paris: Organisation for Economic Co-operation and Development, October 2006.
2. Infant, neonatal, and postneonatal deaths, percent of total deaths, and mortality rates for the 15 leading causes of infant death by race and sex: United States, 2001. Hyattsville, MD: National Center for Health Statistics. (Accessed August 24, 2007, at <http://www.cdc.gov/search.do?action=search&queryText=infant+mortality+rate+2001&x=18&y=15>.)
3. Hoyert DL. Maternal mortality and related concepts. *Vital Health Stat* 3 2007; 33:4.
4. Chartbook on trends in the health of Americans. Table 27: life expectancy at birth, at age 65 years of age, and at age 75 years of age, by race and sex: United States, selected years 1900-2004-193. Hyattsville, MD: National Center for Health Statistics. (Accessed August 24, 2007, at <http://www.cdc.gov/nchs/fastats/lifexpec.htm>.)
5. WHO core health indicators. Geneva: World Health Organization. (Accessed August 24, 2007, at http://www3.who.int/whosis/core/core_select_process.cfm.)
6. Minino AM, Heron M, Smith BL. Deaths: preliminary data for 2004. *Health E-Stats*. Released April 19, 2006. (Accessed August 24, 2007, at <http://www.cdc.gov/nchs/products/pubs/pubd/hestat/prelimdeaths04/preliminarydeaths04.htm>.)
7. Harper S, Lynch J, Burris S, Davey Smith G. Trends in the black-white life expectancy gap in the United States, 1983-2003. *JAMA* 2007; 297:1224-32.
8. Murray JL, Kulkarni SC, Michaud C, et al. Eight Americas: investigating mortality disparities across races, counties, and race-counties in the United States. *PLoS Med* 2006;3(9): e260.
9. Woolf SH, Johnson RE, Phillips RL, Philipsen M. Giving everyone the health of the educated: an examination of whether social change would save more lives than medical advances. *Am J Public Health* 2007; 97:679-83.
10. McGinnis JM, Williams-Russo P, Knickman JR. The case for more active policy attention to health promotion. *Health Aff (Millwood)* 2002; 21(2):78-93.
11. McGinnis JM, Foege WH. Actual causes of death in the United States. *JAMA* 1993; 270:2207-12.
12. Mokdad AH, Marks JS, Stroup JS, Gerberding JL. Actual causes of death in the United States, 2000. *JAMA* 2004;291: 1238-45. [Errata, *JAMA* 2005; 293:293-4, 298.]
13. Seldin DW. The boundaries of medicine. *Trans Assoc Am Phys* 1981; 38:lxv- lxxvi.
14. Schroeder SA. Tobacco control in the wake of the 1998 Master Settlement Agreement. *N Engl J Med* 2004; 350:293-301.
15. Idem. What to do with the patient who smokes? *JAMA* 2005; 294:482-7.
16. Farrelly MC, Heaton CH, Davis KC, et al. Getting to the truth: evaluating national tobacco countermarketing campaigns. *Am J Public Health* 2002; 92:901-7. [Erratum, *Am J Public Health* 2003;93:703.]
17. Warner KE. Tobacco policy research: insights and contributions to public health policy. In: Warner KE, ed. *Tobacco control policy*. San Francisco: Jossey-Bass, 2006:3-86.
18. Schroeder SA. An agenda to combat substance abuse. *Health Aff (Millwood)* 2005;24:1005-13.
19. Koh HK, Joossens LX, Connolly GN. Making smoking history worldwide. *N Engl J Med* 2007; 356:1496-8.
20. Fiore MC, Bailey WC, Cohen SJ, et al. Treating tobacco use and dependence: clinical practice guideline. Rockville, MD: Public Health Service, 2000.
21. Schroeder SA, Sox HC. Trials that matter: varenicline - a new designer drug to help smokers quit. *Ann Intern Med* 2006;145:784-5.
22. Lasser K, Boyd JW, Woolhandler S, Himmelstein DU, McCormick D, Bor DH. Smoking and mental illness: a population-based prevalence study. *JAMA* 2000; 284: 2606-10.
23. Zeidonis DM, Williams JM, Steinberg ML, et al. Addressing tobacco dependence among veterans with a psychiatric disorder: a neglected epidemic of major clinical and public health concern. In: Isaacs SL, Schroeder SA, Simon JA, eds. *VA in the vanguard: building on success in smoking cessation*. Washington, DC: Department of Veterans Affairs, 2005: 141-70. (Accessed, August 24, 2007, at http://smokingcessationleadership.ucsf.edu/AboutSCLC_vanguard.html.)
24. Colton CW, Manderscheid RW. Congruencies in increased mortality rates, years of potential life lost, and causes of death among public mental health clients in eight states. *Prev Chronic Dis* 2006;3: April (online only). (Accessed August 24, 2007, at http://www.cdc.gov/pcd/issues/2006/apr/05_0180.htm.)
25. Smoking Cessation Leadership Center. Partner highlights. (Accessed August 24, 2007, at <http://smokingcessationleadership.ucsf.edu/PartnerFeatured.html>.)
26. Doll R, Peto R, Boreham J, Sutherland I. Mortality in relation to smoking: 50 years' observations on male British doctors. *BMJ* 2004; 328:1519-27.
27. Fiore MC, Croyle RT, Curry SJ, et al. Preventing 3 million premature deaths and helping 5 million smokers quit: a national action plan for tobacco cessation. *Am J Public Health* 2004; 94:205-10.
28. Nestle M. Food marketing and childhood obesity - a matter of policy. *N Engl J Med* 2006; 354:2527-9.
29. Mello MM, Studdert DM, Brennan TA. Obesity - the new frontier of public health law. *N Engl J Med* 2006; 354:2601-10.
30. Gostin LO. Law as a tool to facilitate healthier lifestyles and prevent obesity. *JAMA* 2007; 297:87-90.
31. Pollan M. You are what you grow. *New York Times Sunday Magazine*. April 22, 2007:15-8.
32. Food for thought: television food advertising to children in the United States. Menlo Park, CA: Kaiser Family Foundation, March 2007:3.
33. Isaacs SL, Schroeder SA. Class - the ignored determinant of the nation's health. *N Engl J Med* 2004; 351:1137-42.
34. Adler NE, Boyce WT, Chesney MA, Folkman S, Syme SL. Socioeconomic inequalities in health: no easy solution. *JAMA* 1993; 269:3140-5.
35. McDonough P, Duncan GJ, Williams DR, House J. Income dynamics and adult mortality in the United States, 1972 through 1989. *Am J Public Health* 1997; 87:1476-83.
36. Marmot M. Inequalities in health. *N Engl J Med* 2001;345:134-6.
37. Williams DR, Collins C. US socioeconomic and racial differences in health: patterns and explanations. *Annu Rev Sociol* 1995; 21:349-86.
38. Minkler M, Fuller-Thomson E, Guralnik JM. Gradient of disability across the socioeconomic spectrum in the United States. *N Engl J Med* 2006; 355:695-703.
39. Independent inquiry into inequalities in health report. London: Stationery Office, 1998 (Accessed August 24, 2007, at <http://www.archive.official-documents.co.uk/document/doh/ih/contents.htm>.)
40. Ford ES, Ajani UA, Croft JB, et al. Explaining the decrease in U.S. deaths from coronary disease, 1980-2000. *N Engl J Med* 2007;356:2388-98.
41. Poisal JA, Truffer C, Smith S, et al. Health spending projections through 2016: modest changes obscure Part D's impact. *Health Aff (Millwood)* 2007;26:w242-w253 (Web only). (Accessed August 24, 2007, at <http://content.healthaffairs.org/cgi/content/full/26/w242>.)
42. Institute of Medicine. *To err is human: building a safer health system*. Washington, DC: National Academy Press, 2000.
43. Idem. *Hidden costs, value lost: uninsurance in America*. Washington, DC: National Academy of Sciences, 2003.
44. Isaacs SL, Schroeder SA. Where the public good prevailed: lessons from success stories in health. *The American Prospect*. June 4, 2001:26-30.
45. Gawande A. Annals of medicine: the way we age now. *The New Yorker*. April 30, 2007:50-9.
46. McGinnis JM. Does proof matter? Why strong evidence sometimes yields weak action. *Am J Health Promot* 2001;15:391-6.
47. Kindig DA. A pay-for-population health performance system. *JAMA* 2006; 296:2611-3.
48. Woolf SH. Potential health and economic consequences of misplaced priorities. *JAMA* 2007; 297:523-6.
49. *Healthy People 2010: understanding and improving health*. Washington, DC: Department of Health and Human Services, 2001.
50. Schroeder SA. The medically uninsured - will they always be with us? *N Engl J Med* 1996; 334:1130-3.

Copyright © 2007 Massachusetts Medical Society.

Supported in part by grants from the Robert Wood Johnson and American Legacy Foundations. The sponsors had no role in the preparation of the Shattuck Lecture. No potential conflict of interest relevant to this article was reported. I thank Stephen Isaacs for editorial assistance; Michael McGinnis, Harold Sox, Stephen Shortell, and Nancy Adler for comments on an earlier draft; and Kristen Kekich and Katherine Kostrzewa for technical support.

Section 1

CULTURE AND HEALTH

The Oklahoma Culture and Health

John Feaver, PhD, President, University of Science and Arts, Chickasha

The Oklahoma Academy for State Goals, of course, is ultimately interested in assisting the development of good public policy designed to produce a better and more secure future for all Oklahomans. Because our 2014 Town Hall focus is concerned with public health we will want to see recommendations emerge from our October gathering promoting a healthier Oklahoma.

In this Town Hall, however, as a first step we must be concerned with finding answers to the question: why, by so many measures, is Oklahoma ranked among the least healthy states in the union, socially, physically, mentally? In our race to the top in this regard, what historic, economic, social, political, or cultural features of our living and behaving landscape have produced this most dubious status? And, why over the past four decades has our relative standing as a healthy place to live actually declined?

It should cause major alarm. Probably few conditions threaten Oklahoma's potential to grow and develop more than its poor levels of health. It severely damages training and education effectiveness and attainment, workforce readiness and productivity, and the public's earning and purchasing power. It fuels public cynicism that effectively trumps optimism and diminishes the pool of creatively engaged citizens.

It commands an enormous share of state spending that could be more constructively used to advance strategic goals and objectives. It is a cancer that drains Oklahoma's full spectrum of competitive energies.

So why, with this range of negatives and astonishing disadvantages, is Oklahoma such an unhealthy place? In explaining why people think and behave the way they do and why events occur, historians (I used to be one before I became a college president) distinguish between sufficient

and necessary cause, the latter presumably the single, final reason why something happened in the complex course of the historic process. I'm not sure we'll manage to arrive at this point of insight in discussing the question of why Oklahoma is significantly less healthy than it could be. But perhaps we can achieve a more sufficient understanding of why we are where we are, this as a crucial beginning for improvement.

With this in mind, and as I prepared to pen a few words, I invited three of my talented faculty to talk with me about Oklahoma's health – a California gal in political science by way of the University of Oklahoma, an Oklahoma gal in economics by way of the University of Tennessee, and a North Dakota guy in sociology by way of the University of Nebraska. Leaving off the table Oklahoma's weather patterns – with their spawn of tornados and chronic inducement of respiratory ailments – I and my colleagues did not arrive at any stunning revelation.

We most certainly were stunned that Oklahoma is among the 10 worst states in nearly 30 different poor health and poor health-related categories. The list goes on: high cholesterol, heart disease, premature death, infant mortality, obesity, diabetes, drug deaths, cancer deaths, cardiovascular deaths, high overall death rates, heart attacks, stroke, and high blood pressure.

Nationally, we also compete for top honors in not going to the dentist, not eating fruits and veg-



etables, being poisoned by salmonella, avoiding child immunization, experiencing poor physical and mental health days, not exercising, being killed on the job, living with violent crime, prescribing painkilling drugs for non-medical use, incarcerating men and women and spending less on them for healthcare, children living in poverty, and embracing preventable hospitalization. We beat most states in not having an adequate number of primary care physicians. We do a little better on smoking and suicide, those without health insurance, and the overall well-being of children. Ranked 39th, we edge out the bottom 10.

Of course, the question is, do all these listed poor health-related circumstances, behaviors, and outcomes add up to some sort of overarching picture suggesting a succinct analysis of what it means or are we throwing lots of apples and oranges together to imply some understandable pattern that dissipates upon closer examination?

Perhaps that's where our question of why ought to begin. As it defines Oklahoma, what more exactly might be the affective relationship between the many individual and social pathologies included above?

In our deliberations we must not ignore that the country as a whole shares Oklahoma's poor health. We are a nation facing a health crisis. Oklahoma, however, seems to be much better at it than most others. In your thinking about where our competitive advantage comes from, ponder carefully the social, political and economic inclinations of our people, their cultural tendencies, the history that has forged their habits.

For example, Oklahoma historic behaviors display significant vestiges of the southern American experience. Whether from its early arrival as one part of the forced American-Indian removal from the southeastern states, but especially subsequent non-Indian immigration through and after statehood, southerner's brought with them:

- *a commodity-focused economy;*
- *a penchant for minimal government primarily at the county level;*
- *government administration and priorities linked to the interests of those of status, means, and ownership;*
- *prickly sensitivity to outside forces that might threaten the proper social order of things;*
- *a substantially more socially and economically bifurcated way of life; a firm belief in white supremacy;*
- *a strong belief in the virtue of individual initiative and just reward for one's labor;*
- *a religious fundamentalism attributing social deficiencies to the wages of sin;*
- *fierce loyalty to family and preoccupation with locality if only temporarily in the case of sharecroppers and tenant farmers;*
- *and a low emphasis on the value of a whole community's welfare and rational and collaborative planning for its future progress.*

Many of these values were explicitly and implicitly incorporated into Oklahoma's 1907 Constitution thus to define and encourage the nature and practices of state government and politics.

Indeed, it was this constitutional framework that provided the legal and political compass for Oklahoma's social and economic development after statehood.

It defined a weak central government with limited responsibilities and coordinating authority and placed essential power in the hands of a legislature preoccupied with spreading the spoils of the state treasury (such as it was) as extensively but inclusively as possible.

In this context, and until fairly recently, Oklahoma pursued a largely 19th century rural, frontier American way of life in a 20th century modernizing nation that was otherwise rapidly urbanizing and industrializing. Never mind the region's concentration of American Indians with their complex of existing societies and cultures, properties and economies.

Oklahoma was an "empty" place open to any and all individuals with the right courage, work ethic, and competitive ethos willing to assume the risks of exploiting the God-given opportunities before them. Thus the land rush and lotteries were simple prelude to a largely uncoordinated race to create whole fabric the foundations of a new state.

Foremost, occurred an explosion of county governments and school districts (shortly after statehood at one point over 6000 of them!). They immediately became Oklahoma's unsupervised, scattered and major supplier of organized local public services. Reflecting this was the development of a rapidly decentralizing, rural, and small town culture. It generated a fierce and frenzied competition between aggressive, self-help promoters of local priorities. Looking to gain self-interested and unilateral advantage, opportunity seekers everywhere competed to attract government spending: transportation linkages, county seat designations, prisons, colleges, asylums, eleemosynary institutions, agricultural schools, and more.

Thus emerged Oklahoma's politically spawned and haphazard distribution of state agencies, institutional locales and cost centers for absorbing public funds. It was a pattern which over time not only grew in the amount of its demand but became magnificently ossified by the unrelenting pressures of local and regional commercial interests and by closely guarded access to the fruits of political patronage.

Add to this, Oklahoma remained a relatively poor state with a significantly undiversified economy. Its livelihood was overwhelmingly tied to the world-market vagaries of a commodity-centered existence focused primarily on agriculture and the

extraction of natural resources. Until fairly recent times, Oklahoma's underdeveloped economy was preoccupied with producing relatively cheap raw materials for export to out-of-state, value-added manufacturing centers. In return it relied on imported manufactured goods and investment and credit from outside financial resources.

It was, in effect, a "colonial debtor" economy, one possessed of an inherent nature that specifically and deliberately minimized wealth-creating potential. Its economic dynamic not only reinforced the priority of limited government and low taxes but, understandably, also one without a sustainable capacity for systematically growing taxable dollars and discretionary state revenue.

With the prospect of limited, often fluctuating, funds, Oklahoma's government thus historically faced the shifting fiscal requirement of satisfying the public's insistence to support state services based less on the best strategic interests of the state as a whole than on the highly competitive, self-interested, and introspective proclamations of need from agencies and institutions spread hither and yon. It produced a system of limited taxation and revenue appropriation greatly favoring the status quo and intensely uncomfortable with any genuine effort to reform or transform the mass of its parts.

With little incentive to do otherwise, perforce state budget-making habits inexorably congealed into using available funds on the here and now effectively stripped of meaningful strategic initiatives looking to create an improved future.

Oklahoma's more recent development demonstrates greater maturity as it participates increasingly in the social and economic life of the nation and globally. Greater economic diversification and urbanization are the hallmarks of this trend. Limited government and low taxes, however, remain the fixed ingredients in Oklahoma's much preferred recipe for a commonwealth.

Reinforcing the economic, fiscal, and political determinates of this continuing preoccupation has

been an historic popular suspicion that some “outsider” might intrude “to threaten to fence the free range of individual opportunity”. With centuries of unwanted intrusions into their internal affairs, the American Indian peoples of Oklahoma certainly could understand the downside of the experience.

As part of their culture otherwise, white southerners brought with them fiery resentments embedded in the memory of the Civil War and Reconstruction. It derived also from the driving Manifest Destiny ethos of Euro-American expansion across the continental frontier. As one of North America’s last chaotic frontiers, perhaps it seemed natural that Oklahoma serve as hallowed sanctuary for the ideal of the free and unfettered pursuit of self-interest.

For Oklahomans, over time the outsider has inhabited many forms; always, however, configured as a malevolent threat to a preferred native way of life. Within Oklahoma, a relatively unintrusive state government seemed the most natural and immediate way to buffer against any imagined effort to undermine an individual’s freedom to succeed, or even to fail, but always on one’s own terms.

This part of our heritage is not without extraordinary paradox and a mountain of ironies. It is rural, small-town Oklahoma that has cared most for the limited government-low taxes formula and viewed this lack of relationship with a central authority as best serving its interests and needs. And yet this system, amidst the forces of modernization, came to greatly favor urban growth and development and better living and very much at the expense of the struggling countryside and its many, scattered mainstreets.

And, no entity deserves more credit for priming the pump of Oklahoma’s modernization than the all-time favorite satanic archetype of outsiders – the federal government. During and after WWII especially, Washington’s spending throughout the state built highways, roads and bridges; dams and reservoirs; airports; water and land conservation and energy generation projects; locks, commercial waterways and inland ports; and military instal-

lations; while providing agricultural, mining and other corporate and business subsidies; assistance to American Indians; assistance to the socially and economically disadvantaged; social security and health-related assistance; major investment in training and education and support for a massive increase in vocational and college enrollments.

And, it might be noted, all this without directly and proportionally taxing the people of Oklahoma!

Paradox and irony, however, have a necessary way of disappearing in the midst of well-staged social and political theater and the need to pump up popular self-assurance with myth. It is interesting that the state’s anxiety over the outsider developed over time in context of an unrelenting movement of population. Great waves of immigration and emigration and intra-state relocation, are distinguishing features of Oklahoma’s history.

With a chronic record of population mobility – at one point or another involving a process rendering I would think almost everyone an outsider – one wonders, “why the stigma?” Leaving that question to my expert friends, possibly it does make sense for a population on the move – whether from necessity or preference – to defend, explain, and justify their latitude to do so without the slightest constraint from any authority, however defined or perceived.

So, how might this string of thoughts relate to Oklahoma’s exceptionally well-developed level of poor health? Because I’m not sure (even though I’ve been thoroughly briefed by my faculty), instead of pretending I know, I think I’ll end by posing a few suggestive questions to get you thinking about the matter of why?

My assignment: Before you attend the Town Hall, give some thought to the seven questions on the following page, and write down your best responses. We will review them at the Town Hall.

Maybe there will be a quiz!

The Feaver Town Hall Exam

1 Most generally, if to understand the health of the state, to what extent will it require we address the fundamental question of how and to what end – the patterns involved – have we historically collected and distributed public funds?

2 Studies indicate that some 75 percent of premature (preventive) deaths due to poor health can be attributed to behavioral patterns, genetic predisposition, and environmental exposure. Though in different ways, these three realms of causation probably require major and expensive public policy initiatives to improve the numbers.

Why have we not done so? Are we equipped in Oklahoma politically to mount and sustain long-term strategic commitments to doing so?

3 Are we equipped ideologically to doing so? We share with the nation, perhaps more passionately, often implicit, though strong, views about individual responsibility and hard work. They include a belief that generally one deserves what they get in life; they get in life what they deserve.

Does Oklahoma's social and economic experience significantly promote the thinking that human health is more a private good than a public one; that, in effect, I am not responsible for the consequences of the bad decisions someone else makes?

How might these attitudes affect Oklahoma's tax and spending practices on public health?

4 To what extent has (and does) Oklahoma's geographic dispersal of rural populations, along with a commensurate dispersal in the quality of living conditions and available services affected the state's poor levels of health?

To what extent has Oklahoma's historic and legal-political-social segregation and isolation of racial and ethnic groups confounded the problem?

What has been the effect of Oklahoma's growing urban and rural divide?

5 Since the late 1960s, while Oklahoma's health has improved in absolute terms, it has declined relative to that in most other states.

By one report, since 1970 the incomes of the top 20 percent of Oklahoma wage earners grew by 64 percent, compared to 16 percent for the middle fifth, and less than six percent for the bottom 20 percent.

Granting the impact on Oklahoma employment and income patterns by the vast structural changes in the global economy over that period, what combination of our state's particular social, political and fiscal beliefs and habits might have contributed to this growing gap in income and what does it suggest about the relative decline in Oklahoma's health over the past four decades?

6 The Shattuck Lecture suggests that behavior patterns and social circumstances together contribute to more than half of our longevity. Commensurate to the degree to which Oklahomans have railed against restraints (real or imagined) on their freedom to act, might this have equal consequence on their choice of lifestyle, healthy or not; on their willingness to be swayed by "government warnings" about the ill effects of this behavior or that?

7 How has Oklahoma's intense historic inter-agency competition for always finite state appropriations affected the level and degree of the state's health?

The Colorado Culture of Health

Gerard P. Clancy, MD, Co-Chairman, 2014 Town Hall

What is Colorado doing right? As happens so often with complex subjects such as Population Health, it is almost never just one thing ...

When one compares the age-adjusted death rates of Colorado and Oklahoma over the past 40 years, we see that we both started at exactly the same place. But, over the next four decades, Colorado's age adjusted death rates improved by more than 30% while Oklahoma has improved by only 12%. (See chart at right)

So, what has Colorado done that we Oklahomans have not regarding health improvement? A careful analysis shows that it is probably several factors in combination that have driven this difference. I discuss several of them below:

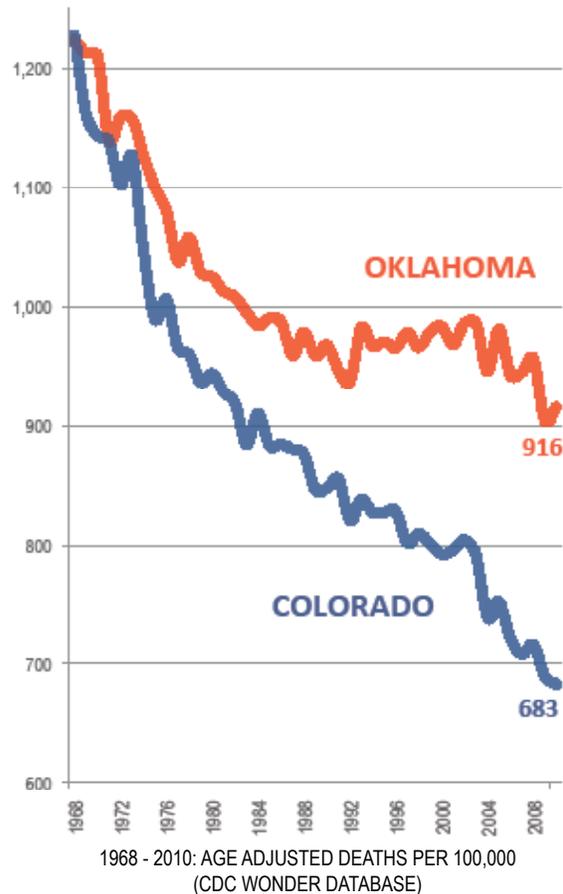
1 Poverty Is a factor, but it is more than poverty ...

POVERTY

Oklahoma 17.0% (10th highest)
US Average 13.4%
Colorado 11.2% (28th highest)

It is well known that poverty and poor health go hand in hand. Over these past four decades, adults living in poverty in both Oklahoma and Colorado have not had access to affordable health care insurance. As is so often the case, those living in poverty work multiple jobs and long hours.

They use their available income for food, shelter, clothing and transportation for their families. They forgo treatment of basic medical issues such as hypertension and rising blood sugars until a medical crisis such as a stroke or myocardial infarction occurs. Obviously the cost of caring for that medical crisis is far greater than if the original



problem, such as hypertension, was addressed in a primary care setting.

The cost of these medical crises is significant – with our hospitals absorbing a great deal of the cost of this uncompensated care. But the financial burden to these families is also significant with a sudden medical crisis being the #1 reason for bankruptcy in the US.

Addressing our high rates of poverty in Oklahoma requires a long view regarding those investments that alter the cycle of poverty; early childhood education, quality K-12 public schools, neighborhood revitalization, access to affordable health care.

But as we will see below, poverty is not that the only factor in the Oklahoma – Colorado divide.

2 Tobacco use is a factor but it is more than tobacco use ...

USE

Colorado 17%
Oklahoma 22%

TAXES

Colorado \$0.84/pack
Oklahoma \$1.03/pack

Cessation of tobacco use continues to be one of the highest impact interventions regarding health improvement. Oklahoma has been a high tobacco use state for many years but the impact of higher tobacco tax rates and aggressive tobacco cessation programs appears to be having an impact on lowering our tobacco use rates.

The impact of vaporized nicotine use on long-term health is still unknown. Continuing to reduce Oklahoma's tobacco use, particularly among minors, needs to be a priority, but as we will see below, tobacco use is not the only factor in the Oklahoma – Colorado divide.

3 Both states struggle with substance abuse so it is more than that ...

ALCOHOL USE

Colorado uses hard liquor at twice our rate.

Colorado Highest (Worst) Quartile
Oklahoma Lowest (Best) Quartile

ILLICIT DRUGS

Colorado Highest (Worst) Quintile
Oklahoma Second Lowest (Best) Quintile

METH INCIDENTS (2013)

Colorado 14 (32nd most)
Oklahoma 678 (7th most)

PRESCRIPTION PAINKILLER OVERDOSES

We have long been concerned with our rates of substance abuse in Oklahoma. As you can see from the above comparisons, Colorado also struggles with substance abuse issues. The Oklahoma – Colorado divide is more than our struggles with substance abuse.

4 Colorado is very well organized to improve health ...

Colorado has several organizations that provide state-wide leadership on planning, policy and guiding of investments with an overarching and explicit goal of being the nation's "Number One" in health.

The Colorado Health Foundation – plays the leading role in developing reports that accurately and honestly assess Colorado's health status and areas that need improvement. The foundation provides an annual health report that supports their progress on their strategic plan entitled "A Roadmap to Number One."

The University of New Mexico's Health Science Center has a similarly bold goal within their Vision 2020 Strategic Plan. In that plan, their overarching and explicit goal is for all of the University of New Mexico health related programs to drive their education, research, service and community partnerships towards the goal of "advancing New Mexico's health rankings farther than any other state by 2020."

The Colorado Trust – With the proceeds from the sale of a health system in 1985, the Colorado Trust was created. The trust's overarching goal is health equity across Colorado. The trust provides more than \$20,000,000 per year for the start-up of health improvement innovations across Colorado.



The Colorado
Health Foundation™

A ROADMAP TO NUMBER ONE

5 Colorado has invested in new models of care and coverage ...

Colorado is home to several programs that are viewed by many as national models for efficiency and performance:

Denver Health – In the face of deep debt in the mid 1990s, Denver General Hospital (the primary public indigent care hospital for Colorado) was transformed to a comprehensive health system for care of the poor as well as one of the nation's top ranked Level 1 trauma center. In this new model, public hospital care, outpatient care, emergency care, department of corrections, sexually transmitted disease management, substance abuse services, ambulance services and Federally Qualified Health Center clinics all came together under the Denver Health umbrella as an integrated health care system for all of Colorado.

Not your ordinary health system, Denver Health is also a national best practice for LEAN efficiency in health care, being able to free up tens of millions of dollars each year through careful attention to quality, measurement and efficient work flow.

Health Information Exchange - Health Information Exchange (HIE) is the secure electronic movement of health-related information among organizations utilizing nationally recognized standards and policies. HIE is key to ensure high quality, more efficient and cost effective patient care. As patients move from one healthcare setting to another, HIE makes sure their appropriate health information is available at the point of care where and when it's needed.

Colorado like many states has more than one regional HIE. The first HIE to develop in Colorado was QHN, which is based out of Grand Junction serving the Western Slope. QHN has been fully operational since 2004 and has focused on advancing HIE in the western parts of the state. Starting in 2010, CORHIO began offering HIE services to providers in communities along the Front Range, Eastern Plains and some of the mountain towns.

CORHIO is a nonprofit, public-private partnership that is improving health care quality for all Coloradans through cost effective and secure implementation of health information exchange (HIE). CORHIO is designated by the State of Colorado to facilitate HIE. CORHIO works closely with and among communities across Colorado to develop and implement secure systems and processes for sharing clinical information. CORHIO collaborates with all health care stakeholders including physicians, hospitals, clinics, behavioral health, public health, long-term care, laboratories, imaging centers, health plans and patients.

QHN is a not-for-profit community partnership, established in 2004 to support the adoption of health information technology, provide health information exchange (HIE) services and promote innovative uses of electronic health information for improved healthcare outcomes. QHN's uniquely connected technology allows its network to not just exchange information, but enhance care coordination, and support the data needs of high value applications to make the information meaningful for hospitals, physician practices and other healthcare organizations. By ensuring that the right information reaches the right people at the right time, QHN enables stakeholders to make smarter decisions that enhance patient care and lower health care costs.

Connect for Health Colorado and Health Insurance Coverage Expansion

Colorado developed their own health insurance exchange, Connect Health for Colorado. After extensive studies on the economic impact to Colorado, Colorado's legislature and Governor approved expansion of Medicaid as part of the Affordable Care Act option.

Uninsured

Colorado - 741,000 (14.3% of population 2013)
Oklahoma - 632,000 (17.1% of population 2013)

Commercial Insurance Expansion (118,628) plus Medicaid Expansion (158,521) = Total New Coverage (277,149). Uninsured covered in first 3 months was 38%.

6 Colorado business leaders know health is an economic development competitive advantage ...

Metro Denver is the Denver region's economic development corporation. This organization has seized the opportunity to market to the world the health of Colorado as a reason to attract new businesses. From Metro Denver's business recruitment web site "Mile High Advantages Section" you will find:

- ***"When you move your company here, be sure to pack your hiking boots."***
- *"The Metro Denver region's outstanding quality of life translates into a productive workforce that experiences less absenteeism and places fewer demands on the healthcare system. Colorado has the nation's lowest rate of obesity and is among the five lowest states for deaths caused by heart disease, diabetes, and cancer."*
- *While no state is immune to rising obesity rates, we're curbing the gradual expansion of our waistslines by re-adjusting our culture. Metro Denver is aiming to become "America's Healthiest Community" by instituting strategies that support: School policy, Worksite wellness, and The creation of interlinked, walkable communities.*

References

1. US Census Bureau www.census.gov
2. Centers for Disease Control www.cdc.gov
3. Gallup Well-being Index www.gallup.com
4. US Substance Abuse and Mental Health Services Administration www.samhsa.gov
5. Metro Denver Econ Development Corporation www.metrodenver.org
6. Colorado Health Foundation www.coloradohealth.org
7. Colorado Trust www.coloradotrust.org
8. National Institute for Alcohol Abuse and Alcoholism (NIAAA) www.niaaa.nih.gov
9. National Institute on Drug Abuse (NIDA) www.drugabuse.gov

CONCLUSION

Colorado Has Created a Culture of Health

When we think of Colorado, we think of the Rocky Mountains and the wonderful outdoor recreational opportunities. Of course people spend a lot of time outdoors in Colorado staying active. But Colorado is also a rural state with open grasslands much like Oklahoma. Like Oklahoma, Colorado has a significant amount of its population living in urban centers with traffic and air quality issues. Colorado is faced with the restrictions in activity that come with winter. Like Oklahoma, Colorado struggles with substance abuse. Colorado's health improvements appear to be more than a function of their outdoor spaces. Colorado has developed a culture of health through:

- An explicit goal to be ranked # 1 in health of all states.
- Investments in planning, policy development, start-up projects and innovation – all to improve health across Colorado.
- Investments in new models of care and coverage across Colorado.
- The realization that health improvement is a key to economic success of the entire state.

The building of this culture of health has demonstrated positive outcomes and perceptions for Colorado including: being the "skinnyest of all states"; ranking second in physical activity; being seventh in the Gallup Well-being Index; and being in the top five states for lowest rates of diabetes, heart disease and cancer

The Oklahoma and Colorado premature death rates were identical in 1968. Since then, Colorado's health has improved three times more than Oklahoma This success was not luck. It started with a lofty goal to be the best in the nation in overall health. Since then, Colorado has shown a track record of smart planning, smart investments and an ability to create a culture of health that has positioned the state for further economic success.

Section 2

THE NEWSPAPERS SAY ...

Prescription for Mental Health: Seattle Times

Gabriel Campanario and Editorial Board, Seattle Times, August 16, 2014

Editorial: What's troubling mental-health care?

*These are the next steps for Washington state on mental-health challenges, found through months of conversations with mental-health professionals, policymakers, elected officials and the people who have been caught without the help they need — people with mental illness, and their families.
Seattle Times editorial board*

Mental illness is a silent epidemic.

Each year, one in four adults in the U.S. — 57.7 million people — experience mental illness, a leading cause of disability. Depression alone gnaws away three times more work hours than diabetes, 20 times more than cancer.

Although mental illness is treatable, and millions recover, the stigma often forces its victims to turn inward. Only 40 percent of Americans living with mental illness ever get treatment.

“We wouldn’t accept it if only 40 percent of Americans with cancers got treatment,” President Obama asked last year. “Why should we accept it when it comes to mental health?”

The Affordable Care Act has enormous potential to reverse those grim statistics and bring mental-illness treatment into daylight. Lost in the politics is the fact that it is already making a difference. About 20 million Americans gained insurance coverage that, finally, ensures mental-health coverage is on par with physical care.

Washington state is already realizing some benefits. April appointments for new patients at mental-health clinics statewide quadrupled from levels in January, when the Affordable Care Act expanded Medicaid eligibility. Clinics, especially in urban areas, open most mornings to find overflowing waiting rooms. In other parts of the state, the law has had little effect.

The act is a work in progress, requiring tweaks to control costs and modernize how care is delivered. But congressional gridlock renders change a remote possibility. Instead, states are left to use the Affordable Care Act’s tools.

Washington should seize the opportunity. Here are three ways the state can deliver on the law’s promise to improve mental health care.

- **Pain caused by funding cuts**
- **Not enough care to meet demand**
- **The empty promise of mental-health parity**

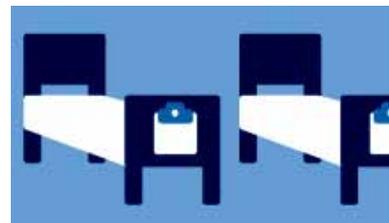
1 PAIN CAUSED BY FUNDING CUTS

The Affordable Care Act leaves a funding gap in a vital part of the mental-health system: crisis response.

Medicaid does not pay for evaluations of people suspected of needing involuntary commitment, nor for their hospitalization. This is due to an odd technical rule eliminating payment for facilities with more than 16 beds.

Washington has filled in the gap with “state-only” money to pay for crisis response, and recently added dozens of beds at smaller facilities.

Still, the state ranks near the bottom in psychiatric beds per capita. That led to the recent Supreme Court ruling prohibiting patients from being “boarded” in emergency rooms while awaiting care.



PRESCRIPTION

The Legislature must respond to the Supreme Court's ruling by funding at least 100 more psychiatric beds, and more robust outpatient treatment, to prevent hospitalization.

Nonetheless, the Legislature recently slashed state-only funding by 20 percent.

Lawmakers gambled the cut wouldn't hurt as much with broader Medicaid eligibility. A bad bet.

With newly covered patients filling clinics, the crisis mental-health system is on life support. "We'll come out of this broke," said Ken Roughton, director of Greater Columbia Behavioral Health in Kennewick.

Other states, such as New York, faced a similar inpatient shortage and launched a new program, called Assisted Outpatient Treatment, which allows a court to require outpatient care for chronically ill patients who have resisted preventive care.

STORY: 'My kid could've died'

Trez Buckland cries at the thought of the day she wouldn't let her son, who has paranoid schizophrenia, come home unless he promised to take his medications. Jon Buckland wouldn't, so when he left Harborview Medical Center's psychiatric ward that day in 2012, he was discharged to a homeless shelter.

"What kind of a mother would do that?" she said. "My kid, my lovely wonderful young man, could've died. But if he didn't take his meds, he'd be dead."

It was a gamble on tough love — and it worked. Jon, now 32, had four hospitalizations in rapid succession in 2011-12. A 3 a.m. encounter with Seattle's self-proclaimed crime fighter Phoenix Jones led to the last one, as Jon tried to explain to Jones how to "create a dragon's brain." "My brain wasn't conducive to thinking," Jon said.

Washington (state) should seize the opportunity. Here are three ways the state can deliver on the law's promise to improve mental health care.

1. *Pain caused by funding cuts*
2. *Not enough care to meet demand*
3. *The empty promise of parity*

After a few hours at the homeless shelter, Jon called home, ready to take medications. He has been there since. Sober for three years, he leads Narcotics and Alcoholics Anonymous groups. As a hobby, he grows coral in a 75-gallon saltwater tank, his hermit crabs hiding amid bursts of purple, green

and orange.

Trez Buckland went back to school, earning a Ph.D. in nursing to understand her son's illness. Her prescription for reform is shared by many other families: loosen restrictive psychiatric commitment laws, and give parents a greater role in their adult children's treatment.

"Parents can play a vital role in keeping their kids alive, and the system doesn't allow it. It's very frustrating."

2 NOT ENOUGH CARE TO MEET DEMAND

More than 525,000 Washingtonians signed up for insurance plans through the Affordable Care Act, dropping the uninsured rate to 10.7 percent.

That's good news, but it also presents a problem. In this state and nationally, years of wavering commitment to building up the health-care workforce leaves the cupboard mostly bare, especially for specialties like psychiatry.



The U.S. needs about 30,000 more psychiatrists, with the need growing further away from cities. Washington's urban areas have about 11 psychiatrists per 1,000 people; rural areas, 2.4, the University of Washington's Center for Health Workforce Studies found.

“I can’t hire people fast enough,” said Rick Weaver of Central Washington Comprehensive Mental Health. He has hired 170 mental-health staffers since January.

PRESCRIPTION

Washington’s congressional delegation should encourage the Obama administration to approve the state’s integration grant request. The Legislature should refocus on enticing more people to go into the mental-health-care field. Additionally, it should pass a bill allowing mental-health professionals to treat patients remotely via video link.

The state Legislature, under budget pressure in recent years, severely cut a student-loan-repayment fund intended to entice health workers to work in underserved areas. A task force to address state health-care personnel shortages recommends restoring \$3.5 million in annual funding.

For a longer-term solution, the state has an ambitious plan to fully integrate its separate, Balkanized mental and physical health-care programs by 2020. If fully realized, this plan is estimated to save the state more than \$1 billion. Gov. Jay Inslee submitted a \$92 million federal grant proposal last month.

STORY: Separate silos of care

When it comes to the shortage of psychiatrists, Jürgen Unützer has diagnosed the problem. Doctors can take “a bag of cash” to do cataract surgery, or “take less money, less prestige, to work with severely disabled, poor patients ... There will never be enough specialists.”

That’s an unusual concession, coming from the guy whose job is to produce psychiatrists at the University of Washington. But Unützer, the psychiatry department chairman, has a solution, and it is entering the mainstream thanks in part to the Affordable Care Act.

He advocates for integration, based on a simple idea. Historical “silos” separating mental- and physical-health care often miss connections, such as diabetes and anxiety or severe weight gain associated with some drugs.

Unützer has the research to prove integration works. A multistate study of 1,801 elderly patients with depression found that integrating mental-health specialists into primary-care clinics saved \$3,363 per patient, and the patients stayed healthier. That model has since been rolled out to about 200 clinics statewide.

Washington’s Medicaid program is now proposing complete integration, with Unützer in on the planning. Making it work, he said, requires a shift in health-care financing to “pay for performance,” which rewards doctors not for just providing a service, but for getting patients healthier.

“It’s a simple concept that makes sense to people,” said Unützer. “The reality is that it’s a huge challenge because we’re 30 years into these separate silos.”

3 THE EMPTY PROMISE OF MENTAL HEALTH PARITY

Mental health parity sounds great on paper. Passed by the state Legislature in 2005 and U.S. Congress in 2008, laws require health-insurance companies to cover mental-health care on par with physical-health care. The Affordable Care Act further stiffened that mandate.

But parity has too often been an empty promise. Insurers have continued to impose restrictions on therapy visits,

to deny types of evidence-based interventions and to gum up claims with extensive demands for prior authorization. New York’s attorney general settled three parity cases in the past year against insurers, including a \$31 million settlement against EmblemHealth for denying mental-health claims at a rate two-thirds higher than physical-health claims. In California, denials for mental-health claims were overturned at the appeals level at a significantly higher rate than for physical-health claims.



PRESCRIPTION

Insurance Commissioner Mike Kreidler should push insurers to live up to the mental health parity law, and pursue enforcement against companies who fail. He should also use the existing law to compile and release insurance appeals.

There is no data available in Washington because Insurance Commissioner Mike Kreidler hasn't compiled it. Nor has his office pursued a single mental-health parity case in the nine years since the state law took effect. Kreidler, who finally issued clarifying rules on the state parity law last month, acknowledges that "not all insurers treat it like other carriers."

Mental-health providers such as Lauren Harris, a Shoreline therapist, already know that. She recently complained to Kreidler's office about an insurer's restrictions on visits for a client who has severe anxiety and depression. "I thought parity is what it meant. But it isn't," she said.

STORY: Insurers in denial

THE 11-year-old girl was intellectually gifted and able to play the piano by ear. She made fantastical drawings. She loved playing Pokémon with her younger sister.

But this spring, the girl, J.F. , was gripped by severe mental illness. She could hear animals speak, believed she had a real Pokémon family,

tried to drown her younger sister and threatened to stab herself, according to medical notes.

"It's a gut-wrenching, horrendous experience," said her mother, Amy Bushlach of Issaquah. "The closest thing I can compare it to is the death of a child, because of the severity of her illness." Diagnosed with a major mental illness, J.F. spent three months in inpatient mental-health treatment at Ryther Child Center. Bushlach saw her daughter "re-emerge."

In June, Bushlach's insurance, Moda Health, denied further coverage. The daughter's doctors recommended a longer stay. Moda said it was not medically necessary because J.F. made only modest improvement.

The Bushlachs lost an appeal, and due to pay Ryther's \$13,600-a-month cost, they sent J.F. to live with grandparents, desperate to keep her away from younger siblings, including a 9-month-old. J.F. continues to struggle, but is reducing antipsychotic medications because of severe, possibly irreversible side effects. "We're right back to where we were before Ryther, after all that work," Bushlach said. "It's devastating."

Editorial board members are editorial page editor Kate Riley, Frank A. Blethen, Ryan Blethen, Sharon Pian Chan, Jonathan Martin, Robert J. Vickers, Erik Smith, Thanh Tan, William K. Blethen (emeritus) and Robert C. Blethen (emeritus).

Mental Health Matters



THE NEWSLETTER OF SOUND MENTAL HEALTH

We Should ... Quit Abusing Drugs

Owen Canfield, Editorial Board, The Oklahoman

By any measure, the abuse of prescription painkillers in Oklahoma is a near epidemic. According to preliminary figures from the state Bureau of Narcotics and Dangerous Drugs Control, 788 Oklahomans died from overdoses in 2013.

Of those, 593 involved at least one prescription drug. And the death toll is sure to rise as the state medical examiner's office files additional reports in the coming months. Oklahoma ranks among the top five nationally for per-capita sales of hydrocodone and morphine, and is No. 2 for the sale of Demerol and fentanyl. Oklahoma is among the top 10 nationally for the purchase of all prescription painkillers.

Terri White, the state's mental health commissioner, says, "That, in part, is why 81 percent of all unintentional poisoning deaths in our state involve at least one prescription drug. We must do something about this."

Lawmakers took some steps during the 2014 session. They passed a bill that improves communication between the ME's office and the state narcotics agency on tracking prescription drug overdose deaths. Another gives the state medical board the power to issue subpoenas in board investigations, including complaints about prescription drug abuse.

What is most needed, however, is greater use by doctors of an online database that tracks prescription drug prescriptions. Pharmacists by law must log every new controlled dangerous substance into the database.

But doctors are not required to check the registry before issuing new prescriptions, and many choose not to. Lawmakers in 2015 must produce a bill that results in greater use of the database, which could help curb "doctor shopping" by patients and improve health outcomes in the state.

We Should ... Address Mental Health

Editorial Board, The Tulsa World

THE PROBLEM

Oklahoma is a state with enormous mental health issues, ranking No. 2 nationally in adults reporting “serious psychological distress” in the past year. That’s at least 380,000 residents, accounting for more than 14 percent of adults in the state, experiencing such issues. Overall, more than 21 percent of adult Oklahomans reported some type of mental health issue in the previous 12 months, and more than 12 percent experienced a substance abuse problem.

What affects the mind, affects the body. Mental disorders and the puzzling emotional and physical pain they cause, are the state’s third leading cause of chronic disease, behind only pulmonary conditions and hypertension. And, they are more prevalent than heart disease, diabetes, cancer and stroke, according to the Oklahoma Department of Mental Health and Substance Abuse Services. Chronic mental health and substance abuse problems can lower life expectancy by as much as 30 years.

For years, Oklahoma has attempted to improve and expand services for the mentally ill. But the overall problems, staggering in dimension, only get worse, with up to 950,000 Oklahomans in need of mental health services. The entire state delivery system, including public and private providers, needs attention and support. The mental health department, in particular, is struggling to provide services in the face of essentially flat or reduced funding.

WHY

Oklahoma policy makers have discussed this issue for decades, with legislatures, past and present, essentially putting their left foot in; taking their left foot out – playing The Hokey Pokey with funding and support for the mentally ill.

It’s time to stop dancing around the issue.

- The Legislature, at the earliest date, should conduct an interim study, gathering professionals on the front lines, to inform lawmakers about what realistically can be done to intervene earlier in identification and treatment for those suffering from mental illness and substance abuse, and the level of funding needed system-wide to strategically address the problem upstream rather than always downstream.
- Mental health providers and other professionals as well as those actually affected by mental illness and substance abuse should coordinate to provide multiple media outlets with a steady stream of op/eds informing and reminding the public and policymakers of the width and depth of the issue – how this affects every Oklahoman, and suggesting what should be done.
- A task force, similar to a group created by the governor several years ago, should be resurrected or reinvigorated to provide a comprehensive plan for addressing the issue, and for securing sustained and strategic funding.

We Should ... Re-examine Physician Production

Editorial Board, June 29, 2014, The Sunday (Lawton) Constitution

State and community leaders would be well advised to take a look at new ideas to attract new primary care doctors to Southwest Oklahoma to preserve the viability of the region.

It would appear that we are experiencing the perfect storm in medical care: We have a physician shortage while we are experiencing a rising number of baby boomer retirements and low insurance reimbursement rates.

The low reimbursement rates are changing the health care delivery system business models that we grew up with.

The Sooner State, according to an Oklahoma Watch story last year, had 76 doctors per 100,000 people, which is less than the national average of 220 per 100,000. That is sure to get worse as more physicians retire. Nationally, the shortage is expected to be 20,400 by 2020.

By government design, private sector-oriented, competition-based medicine is disappearing. One result likely will be fewer patient choices and reduced incentives to develop new drugs and equipment. That is unfortunate.

Because of new federal rules and regulations, many doctors no longer want to be private business people. They once had their own offices and staffs, labs and maybe X-ray and other equipment. Those businesses paid income taxes, payroll taxes, property taxes, and sales taxes on items consumed.

Now, many new doctors want employment and are working for hospitals, some of which are not-for-profit, tax-exempt organizations. Lost are business income taxes and property taxes for the state, county and federal governments, plus the public schools and cities.

Some physicians are happy being employees. They have guaranteed income packages and work five days. They find that better than being on-call, private business people with huge overhead costs. As long as sales quotas are met, the hospitals welcome the revenue generators to their staff.

While the salaries may be close to being identical, the competition between urban and rural areas for medical professionals can be very intense. Bigger cities lure them with more entertainment and cultural amenities.

Other doctors want to remain in the private sector, however. They are looking for niches, such as direct primary care, while still others plan to maintain their practices and work regular hours while accepting cash only.

Doctors and other medical services providers cite the huge, expensive, cumbersome, conflicting and frequently changing medical coding systems as part of their frustration. That system can delay payment for services for months if the bureaucracy is unhappy with the written justification for care. A new coding system is about to be implemented and providers dread it.

As a result, many doctors no longer accept private insurance, Medicaid or Medicare because of declining reimbursement rates for their services. Finding a doctor may be a bigger challenge in the future. Just last week, state Medicaid cut its reimbursement rates, and every year Congress threatens to cut Medicare's rate more.

Older doctors are retiring. They don't want to deal with more government and its requirements.

The retirements, change of business models and refusal to accept insurance may just encourage more sick people to go to the emergency rooms. Administrators discourage that practice because they say that is where the cost to serve is the highest.

To keep more people out of the emergency rooms, policy makers should examine incentives to expand a growing private-sector model, urgent care businesses. Typically they are open every day, 7 a.m. to 7 p.m. That model may be part of the answer, especially in more rural areas, perhaps using city-county health department facilities on holidays and weekends to serve patients.

Policy makers could consider incentives to revise, as needed, training and licensing requirements for nurse practitioners and physician assistants. If more PAs and NPs were deployed to provide primary care, the shortage of primary care medical professionals could be cut to 6,400, experts estimate.

Another possible solution is for state and county citizens or groups of counties to evenly split the cost of expanding physician residency programs into smaller-market hospitals.

Lastly, policy makers might review recruitment and incentives to encourage former armed forces corpsman and medics to expand and upgrade their education and training to provide medical care to Oklahomans when completing their studies and exams.

Some creative thinking is needed to expand medical services in Southwest Oklahoma.

We Should ... Modify Our Behaviors

Editorial Board, The Lawton Constitution

One area of health care that should not be overlooked by state policy makers is reviewing the community's effort to educate people on how to take better care of themselves. As the state's doctor shortage becomes more apparent, staying healthy may be key to reducing costs and promoting a healthier community. Is the average person taking care of himself as well as he should?

We bet not. How many people knew there were at risk of becoming a diabetic and what to do about it before it was diagnosed? Perhaps not many. It is hard to believe that Oklahomans would not have changed their lifestyles had they known diabetes was a real possibility for them.

The Oklahoma Health Department estimates that one-third of us are obese, while nearly two-thirds of us are overweight or obese. "The state consistently ranks low for fruit and vegetable consumption and physical activity, which contributes to the high percentage of obesity in the state," the OHD website reports.

"Among adult Oklahomans, (18 years and older) approximately 383,800 people (11.1 percent) reported being diagnosed with diabetes by health care professionals in 2011. Oklahoma ranked 4th highest in diabetes mortality rate in the nation for 2010, according to a OHD fact sheet.

Interestingly, in 2000 Oklahoma and the nation reported that about 6 percent of the population were diagnosed with diabetes. Since then, Oklahoma has grown to 11.1 percent while the national rate is about 9 percent.

Another contributing factor to the obesity rate is the lack of exercise. A total of 31.2 percent of

Oklahoma adults do not participate in any leisure-time physical activity, OHD says. That's a mistake.

Fortunately, the Fit Kids Coalition has been working for several years to get the message out to young people about how to adopt healthier lifestyles. Some progress has been made. Another example of people not taking care of themselves occurred last year. In February, more than 1,000 people took advantage of a wonderful opportunity. It was a free dental clinic at the Great Plains Coliseum sponsored by the Oklahoma Dental Association.

Similar clinics have been offered in other parts of the state and the participation has been overwhelming, too.

The dental clinic showed that people may not have been going to the dentist as they should. Is it possible that many Oklahomans may not be going to their physicians for other checkups when they should, just waiting for things to get better.

Sometimes they don't.

Some incentives may be needed. Several years ago, the California-base Safeway grocery chain offered employees reductions in their health insurance premiums if they achieved established targets for cholesterol, blood pressure, body mass index, weight, physical activity and others.

The program was a success, saving the employer and employee money.

What can we all do to take better care of ourselves? How do we do it? An education program would help.

We Should ... Increase Physical Activity

Editorial Board, The Muskogee Phoenix

Muskogee must create many more miles of sidewalks, complete the Centennial Trail and expand fitness options at city parks to help citizens become more healthy.

Most of the health problems in Muskogee and surrounding communities can be traced back to alcohol and tobacco consumption, poor diets, and sedentary lifestyles.

Muskogee could help to reverse some of these trends by making it easier and more convenient to exercise.

Muskogee should make sure that any citizen in our city can walk — on sidewalks or the trail — to get to a city park.

Too many areas in our city do not have sidewalks.

In some cases, it is more convenient to drive to a park to walk or jog.

We believe citizens would be encouraged to get off the couch and walk, run or jog if the paths were available around the city.

We believe that if you start getting into better shape that we will abandon some of our worst habits — tobacco and alcohol use.

The city of Muskogee must invest more money into fitness. The recent addition of bike lanes was a good idea.

State and federal government should be a part of this process, too. We must look for every grant option available to fund a city of sidewalks.

The city needs to make fitness not just an option, but such a convenient option that it is almost impossible to turn down.

We Should ... Do More For The Mentally Ill

Julie DelCour, Associate Editor Tulsa World (March 21, 2014)

The Las Vegas Strip turns out to be a bad bet for the severely mentally ill. Over five years, the cash-strapped state of Nevada put 1,500 patients on buses to other states. PRNEWSFOTO / BestOfVegas.com

What happens in Vegas, stays in Vegas, unless you're unlucky enough to be poor, mentally ill and through some crisis end up in a psychiatric facility in Sin City.

In that case, you're given a bus ticket, courtesy of the state of Nevada, and shipped off to a destination beyond the state line, usually with no say in where you're headed.

In 1970, Roy Clark made famous the song, "Thank God and Greyhound" you're gone. Some 45 years later, cash-strapped Nevada took it to heart, unable or unwilling to fix its subpar mental health system for the poor. Over five years, more than 1,500 people, mainly from Las Vegas, ended up in sunny California, or farm-fed Iowa, or maybe energy-oozing North Dakota, and other places. None of the states received notice that recently institutionalized mental patients — confused, despondent, angry, withdrawn, aggressive or seriously broken — would be dumped on their doorsteps. Nevada didn't care, as long as it shifted its cost burden to some other state's taxpayers.

Better than that

Oklahoma likes to think it's better than that. We don't banish mentally ill people who cannot afford treatment. We let them stay right here and do without.

Some 7,000 indigent residents will see their mental health services disappear this coming fiscal year unless \$21 million miraculously falls out of government coffers. We can hope but that's an unlikely scenario. The Legislature is down \$188 million heading into the budgeting process.

The 7,000 will join more than 700,000 others not receiving treatment yet trapped in the private hells of addiction, depression, schizophrenia or any number of debilitating disorders of the mind.

Lawmakers must decide if the state can afford to give the Oklahoma Department of Mental Health and Substance Abuse Services extra help when other agencies also are hurting.

Common education is down \$200 million, after years of fiscal evisceration.

The prison system, with 26,000 inmates, cannot make it through a budget year without requesting a supplemental appropriation.

The Department of Human Services needs at least \$33 million to make it to the end of the fiscal year.

Most state employees have not had a raise in seven years.

You get the picture.

Starting too late

But here is another picture: Oklahoma is a state with enormous mental health issues, ranking No. 2 nationally in the number of adults suffering mental illness. Twenty-one percent of adult Oklahomans reported having a mental health issue in the past year and 12 percent experienced a substance abuse issue.

Last year, ODMHSAS stretched its \$155 million budget to provide help to 182,000 individuals.

“But this is only 182,000 of the 700,000 to 950,000 in need,” Terri White, agency commissioner, told a packed legislative hearing when she requested the extra \$21 million to pay bills not there the year before.

“Unfortunately, many of these individuals did not — and may never — receive the care they need to appropriately treat their illness. ... Prevention and treatment for mental health and substance abuse issues are the most pressing concern, health or otherwise, facing our state. “

For Oklahoma, it is a Catch-22 — it cannot afford to fund adequately its mental health system but it really cannot afford not to, considering the consequences. When budgeting, lawmakers must prioritize, something the state failed to do, beginning generations ago, in its approach to social problems. So we have a troubled history of simply reacting to problems — not intervening early or quickly enough to help prevent or avert problems later. Evidence of that can be found in high levels of child and domestic abuse, drop-out rates and failure in school, substance/alcohol abuse, the huge number of people behind bars.

“We treat things downstream in Oklahoma,” is how Mike Brose, executive director of the Mental Health Association of Oklahoma, describes it. Issues and situations that might have been prevented early on, aren’t, and morph into bigger problems — suicides, criminal behavior, family deterioration, severe health problems.

In Oklahoma, we don’t like government doing too much; why should taxpayers pay to fix other people’s problems? The attitude reflects a disconnect between cause and effect. We pony up \$20,000-plus a year to keep someone in prison when we could have spent a few thousand earlier on mental health or addiction treatment to help that person avoid ending up in an orange prison jumpsuit.

“We’ve got to move things upstream and be more preventative, try to identify things in early childhood, be able to give access to care,” Brose said. “If we really embrace this, we can move the needle.”

Consequences

Here are a few consequences of that needle not moving:

- Mental disorders are the third leading cause of chronic disease in Oklahoma.
- A third of all youth in custody and 26 percent of those on probation have a substance abuse issue.
- A high percentage of inmates in prisons — and certainly in the Tulsa County Jail — have a mental health or substance abuse issue.
- 71.7 is the average age of death in the general population. For those suffering mental illness the average moves down to 57.3, to 43.2 with addictions, and to 40.6 when mental illness and addiction co-occur.

“Many people do not get the treatment they need when they need it,” White said. “Just as with any other illnesses, the disease worsens without appropriate care, and negative consequences follow.”

As I said, Oklahoma does not banish its mentally ill. We keep them right here, where 70 percent of adults and 40 percent of kids in need of mental health services never get help. That’s not much better than leaving Las Vegas.

We Should ... Do All The Above *Editorial Board, The Journal Record*

The latest report on Oklahoman's health isn't likely to make anyone feel very good.

Measured against the rest of the nation, Oklahoma scored a C or below in every health category except influenza and pneumonia vaccinations for seniors. In the other 34 categories, Oklahoma brought home eight Cs, 17 Ds and nine Fs. Sixth graders with report cards like that live in fear of the woodshed.

The report showed that Oklahoma has the fourth highest death in the nation, a whopping 23 percent higher than the national rate. And although the state's mortality rate dropped 5 percent since 1992, the national rate dropped 20 percent in the same time.

Oklahoma has the highest respiratory disease mortality rate, the fourth-highest death rate from diabetes, the fourth-highest death rate from stroke, the third-highest from heart disease and the 12th highest from cancer.

It's not hard to understand why the numbers are so bad. Oklahoma has the next-to-lowest rate of fruit consumption in the nation; it places 44th in vegetable consumption, 44th in physical activity and has the sixth-highest obesity rate.

In other words, Oklahomans eat a lot of unhealthy food and spend a lot of time on the couch. Even worse, about one-fourth of them are having a cigarette after that meal, a rate 25 percent greater than the national average.

Smoking kills more Oklahomans than alcohol, auto accidents, AIDS, suicides, murders and illegal drugs combined, and costs taxpayers an estimated \$1.16 billion per year in related health care. Sadly, it also contributes to Oklahoma's infant mortality rate, the 43rd worst in the U.S., and an overall mortality rate that's 23 percent higher than the national average. More than 85 percent of COPD deaths are caused by smoking. Thirty percent of cancer deaths are from lung cancer; 75 percent of lung cancer deaths are caused by smoking.

There were some bright spots, thanks to programs such as Certified Healthy Oklahoma and Every Week Counts. Smoking is down 2.8 percentage points compared to last year, but the rate remains 3.7 points higher than the national average. Infant mortality rates improved from 8.6 per 1,000 in 2007 to 7.6 per 1,000 in 2010, but that's still 43rd worst in the country.

Oklahomans value hard work and prosperity. Neither occurs for sick residents. The state's health grades are still a long way from the honor roll, and there is no chance of a superior lifestyle as long as Oklahomans are sick and dying. We deserve the woodshed.

We must do better.

Section 3

HEALTH RANKINGS

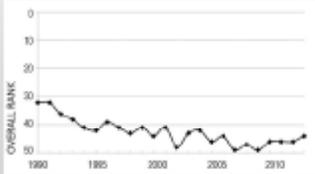
Overall Health Ranking

United Health Foundation 2014

UNITED HEALTH FOUNDATION | AMERICA'S HEALTH RANKINGS® 2013

OKLAHOMA

Overall Rank: 44



Change: ▲ 2
Determinants Rank: 43
Outcomes Rank: 45

Strengths:

- Low prevalence of binge drinking
- Low incidence of pertussis infections
- Moderate per capita public health funding

Challenges:

- High rate of drug deaths
- Low immunization coverage among children
- Limited availability of primary care physicians

OKLAHOMA

Ranking Oklahoma is 44th this year, it was 46th in 2012.

Highlights

- Obesity remains high at 32.2 percent of adults; 875,000 adults are obese in Oklahoma. In addition, 28.2 percent of adults—almost 770,000—are physically inactive in the state.
- In the past year, smoking prevalence decreased from 25.1 percent to 23.3 percent of adults; more than 630,000 adults still smoke in Oklahoma.
- In the past 2 years, public health funding decreased by 40 percent from \$113 to \$69 per person.
- In the past 5 years, the rate of preventable hospitalizations decreased from 95.9 to 76.9 discharges per 1,000 Medicare beneficiaries; however, Oklahoma still ranks poorly among the states for this measure.
- In the past 10 years, the percentage of children in poverty increased from 21.4 percent to 27.4 percent of persons younger than 18 years.
- In the past 10 years, the rate of cardiovascular deaths decreased from 402.2 to 331.5 deaths per 100,000 population.

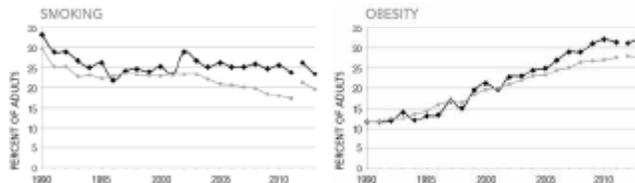
Health Disparities

In Oklahoma, 49.3 percent of adults aged 25 years and older with at least a high school education report their health is very good or excellent compared to only 19.5 percent with less than a high school education, resulting in a gap of 29.8 percent.

State Health Department Website
www.ok.gov/health

DETERMINANTS	2013		NO. 1 STATE
	VALUE	RANK	
BEHAVIORS			
Smoking (Percent of adult population)	23.3	39	10.6
Binge Drinking (Percent of adult population)	14.4	9	10.2
Drug Deaths (Deaths per 100,000 population)	18.8	46	5.0
Obesity (Percent of adult population)	32.2	45	20.5
Physical Inactivity (Percent of adult population)	28.3	44	16.2
High School Graduation (Percent of incoming ninth graders)	75.5	27	91.4
COMMUNITY & ENVIRONMENT			
Unintentional Falls (Deaths per 100,000 population)	49.1	41	12.8
Occupational Fatalities (Deaths per 100,000 workers)	7.8	45	1.9
Intentional Disease (Continued from Chronicity, Pediatric, Subcategory)	-0.25	18	-0.90
Guns (Deaths per 100,000 population)	347.0	23	140.0
Poisonings (Deaths per 100,000 population)	1.8	7	0.7
Suicides (Deaths per 100,000 population)	22.2	41	6.8
Children in Poverty (Percent younger than 18 years)	27.4	46	9.7
Air Pollution (Particulate of fine particles per cubic meter)	9.7	32	5.8
POLICY			
Lack of Health Insurance (Percent without health insurance)	17.1	39	3.8
Public Health Funding (Dollars per person)	\$60	28	\$225
Immunization—Children (Percent aged 19 to 35 months)	61.0	48	80.2
Immunization—Adolescents (Percent aged 13 to 17 years)	69.8	32	82.0
CLINICAL CARE			
Low Birthweight (Percent of live births)	8.5	33	6.0
Primary Care Physicians (Number per 100,000 population)	82.7	48	198.1
Dentists (Number per 100,000 population)	60.2	37	95.0
Preventable Hospitalizations (Number per 1,000 Medicare beneficiaries)	76.0	43	27.4
ALL DETERMINANTS	-0.42	43	0.70
OUTCOMES			
Diabetes (Percent of adult population)	11.6	43	7.0
Four Medical Health Days (Days in previous 30 days)	4.2	41	2.8
Four Physical Health Days (Days in previous 30 days)	4.4	42	2.9
Disparity in Health Status (By educational attainment*)	29.0	27	19.7
Infant Mortality (Deaths per 1,000 live births)	7.7	44	4.4
Cardiovascular Deaths (Deaths per 100,000 population)	331.5	48	198.0
Cancer Deaths (Deaths per 100,000 population)	209.0	43	141.3
Premature Death (Years lost per 100,000 population)	9,820	47	5,469
ALL OUTCOMES	-0.25	45	0.33
OVERALL	-0.67	44	0.92

*Negative scores denote less than the US average; positive scores indicate more than US average
†Only scores to high school, some business school, aged 25 and older without a high school education and those with at least a high school education.



STATE — OK NATION — NATION
The 2012-2013 data in the state graphs are not directly comparable to prior years. See Methodology for additional information.

ECONOMIC ENVIRONMENT	OK	US	MEASURE	ADULT POPULATION AFFECTED
Annual Unemployment Rate (2012)	6.1	8.1	Smoking	632,000
Annual Unemployment Rate (2012)	6.6	14.7	Obesity	875,000
Median Household Income (2012)	\$48,455	\$58,054	Physical Inactivity	796,000
			Diabetes	313,000



For a more detailed look at this data, visit www.healthyok.org

Seniors Health Ranking

United Health Foundation 2014

OKLAHOMA

SENIOR HEALTH

DETERMINANTS	BEHAVIORS	2014		NO 1 STATE
		VALUE	RANK	
	Smoking (Percent of adults aged 65+)	18.9	43	4.7
	Chronic Drinking (Percent of adults aged 65+)	1.8	2	1.7
	Obesity (Percent of adults aged 65+)	28.5	28	14.1
	Underweight (Percent of adults aged 65+)	1.8	39	0.8
	Physical Inactivity (Percent of adults aged 65+)	28.7	49	21.1
	Dental Visits (Percent of adults aged 65+)	68.5	45	77.2
	Pain Management (Percent of adults aged 65+)	-89.9	41	80.7
	BEHAVIORS TOTAL	-0.149	44	
	COMMUNITY & ENVIRONMENT			
	Poverty (Percent of adults aged 65+)	8.5	34	5.4
	Volunteerism (Percent of adults aged 65+)	22.5	33	38.8
	Working Hours: Quality (Percent of 4 & 5 star ratings)	28.5	45	67.3
	C&E — MACRO PERSPECTIVE TOTAL	-0.052	41	
	Social Support (Percent of adults aged 65+)	81.3	16	85.4
	Food Insecurity (Percent of adults aged 65+)	14.2	27	8.4
	Community Support (Dollars per adult aged 65+ in poverty)	\$666	36	\$5,088
	C&E — MICRO PERSPECTIVE TOTAL	0.006	28	
	COMMUNITY & ENVIRONMENT TOTAL	-0.046	34	
	POLICY			
	Low-Cost Monthly Home Medicines (Percent of out-of-pocket)	25.0	49	1.1
	Prescription Drug Coverage (Percent of adults aged 65+)	84.2	41	89.8
	Catastrophe Shortfall (Percent of no-claim payoffs/claims)	84.5	47	13.1
	POLICY TOTAL	-0.226	50	
	CLINICAL CARE			
	Qualified Health Care Provider (Percent of adults aged 65+)	85.7	12	87.5
	Recommended Hospital Care (Percent of hospitalized patients aged 65+)	87.4	47	98.1
	Flu Vaccine (Percent of adults aged 65+)	87.8	5	70.1
	Health Screenings (Percent of adults aged 65-74)	81.7	46	82.4
	Chronic Management (Percent of Medicare beneficiaries)	72.8	46	86.1
	Home Health Care (Number of visits per 1,000 adults aged 75+)	85.8	25	238.8
	Preventable Hospitalizations (Charges per 1,000 Medicare beneficiaries)	70.8	43	27.4
	Hospital Readmissions (Percent of hospitalized patients aged 65+)	18.1	36	12.3
	Hospital Care (Percent of discharges aged 65+)	68.8	14	63.0
	Hospital Deaths (Percent of discharges aged 65+)	28.8	36	18.4
	CLINICAL CARE TOTAL	-0.062	45	
	ALL DETERMINANTS	-0.484	48	
	OUTCOMES			
	EDU Usage (Percent of discharges aged 65+)	18.7	19	5.1
	Falls (Percent of adults aged 65+)	32.7	47	14.5
	Hip Fractures (Rate per 1,000 Medicare beneficiaries)	8.2	50	3.0
	Health Status (Percent very good or excellent of adults aged 65+)	25.4	42	48.3
	At-Risk Adult (Percent of adults aged 65+)	68.8	44	68.2
	Prevention Deaths (Deaths per 100,000 population aged 65-74)	2344	45	1425
	Walk Excessives (Percent of adults aged 65+)	21.8	40	7.0
	Mental Health Days (Days in previous 30 days)	2.5	35	1.5
	ALL OUTCOMES	-0.235	44	
	OVERALL	-0.718	47	

OKLAHOMA

Overall Rank: 47

Determinants Rank: 48

Outcomes Rank: 44

Strengths:

- Low prevalence of chronic drinking
- High percentage of dedicated health care providers
- High flu vaccination coverage

Challenges:

- High prevalence of physical inactivity
- Low percentage of recommended hospital care
- Highest prevalence of hip fractures

Rankings: Oklahoma is 47th in this Senior Report. In the 2013 Edition, it ranked 49th.

Highlights:

- Oklahoma has one of the highest rates of physical inactivity among seniors in the country; 36.7 percent, or 189,000 seniors in Oklahoma are physically inactive.
- The prevalence of underweight seniors decreased by 42 percent in the past year, from 3.1 percent to 1.8 percent of adults aged 65 and older.
- In the past year, senior flu vaccination coverage increased by 8.7 percent.
- Geriatrician shortage remains very high in Oklahoma, with a slight increase in the shortfall in the past year.
- In the past year, the percentage of seniors who received recommended health screenings increased by 5 percent, from 77.9 percent to 81.7 percent of adults aged 65 and older.

Disparities: In Oklahoma, 57.7 percent of seniors with an income greater than \$75,000 report their health is very good or excellent compared to only 23.8 percent of seniors with an income less than \$25,000.

State Health Department Website:
www.ok.gov/health

SUPPLEMENTAL MEASURES

	2014		NO 1 STATE
	VALUE	RANK	
Education (Percent of adults aged 65+)	18.1	35	31.0
Multiple Chronic Conditions (Percent of adults aged 65+)	26.5	30	20.9
Cognition (Percent of adults aged 65+)	18.0	34	8.8
Depression (Percent of adults aged 65+)	18.9	47	8.3
Suicide (Deaths per 100,000 adults aged 65+)	15.5	27	8.4

SENIOR POPULATION GROWTH	STATE	US



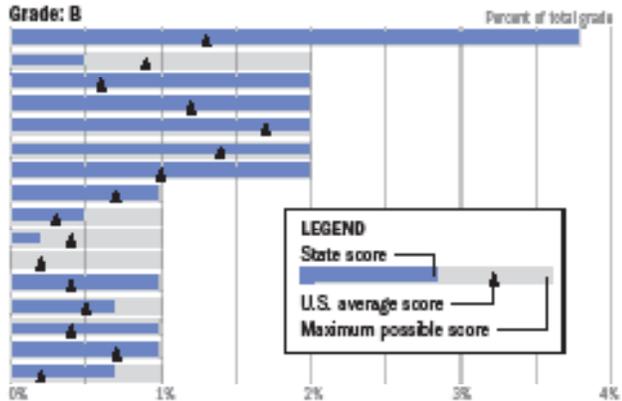
For a more detailed look at this data, visit www.seniorsrankings.org/center/OK

NAMI Score Card: OKLAHOMA

Grade: B

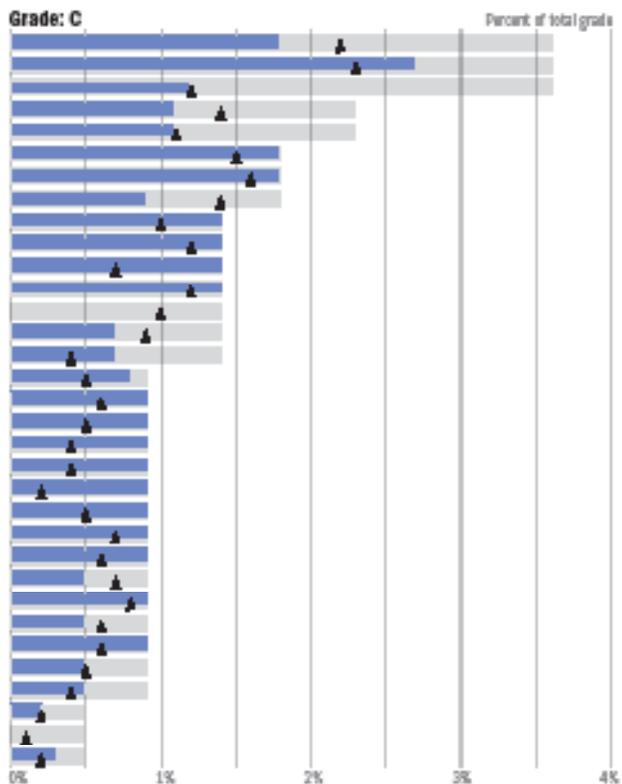
Category I: Health Promotion & Measurement

- Workforce Development Plan
- State Mental Health Insurance Parity Law
- Mental Health Coverage in Programs for Uninsured
- Quality of Evidence-Based Practices Data
- Quality of Race/Ethnicity Data
- Have Data on Psychiatric Beds by Setting
- Integrate Mental and Primary Health Care
- Joint Commission Hospital Accreditation
- Have Data on ER Wait-times for Admission
- Reductions in Use of Seclusion & Restraint
- Public Reporting of Seclusion & Restraint Data
- Wellness Promotion/Mortality Reduction Plan
- State Studies Cause of Death
- Performance Measure for Suicide Prevention
- Smoking Cessation Programs
- Workforce Development Plan - Diversity Components



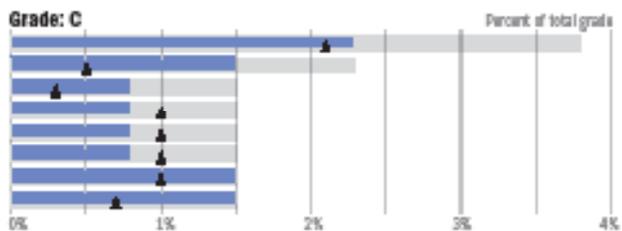
Category II: Financing & Core Treatment/ Recovery Services

- Workforce Availability
- Inpatient Psychiatric Bed Capacity
- Cultural Competence - Overall Score
- Share of Adults with Serious Mental Illness Served
- Assertive Community Treatment (ACT) - per capita
- ACT (Medicaid pays part/all)
- Targeted Case Management (Medicaid pays)
- Medicaid Outpatient Co-pays
- Mobile Crisis Services (Medicaid pays)
- Transportation (Medicaid pays)
- Peer Specialist (Medicaid pays)
- State Pays for Benzodiazepines
- No Cap on Monthly Medicaid Prescriptions
- ACT (availability)
- Certified Clubhouse (availability)
- State Supports Co-occurring Disorders Treatment
- Illness Self Management & Recovery (Medicaid pays)
- Family Psychoeducation (Medicaid pays)
- Supported Housing (Medicaid pays part)
- Supported Employment (Medicaid pays part)
- Supported Education (Medicaid pays part)
- Language Interpretation/Translation (Medicaid pays)
- Telemedicine (Medicaid pays)
- Access to Antipsychotic Medications
- Clinically-Informed Prescriber Feedback System
- Same-Day Billing for Mental Health & Primary Care
- Supported Employment (availability)
- Integrated Dual Diagnosis Treatment (availability)
- Permanent Supported Housing (availability)
- Housing First (availability)
- Illness Self Management & Recovery (availability)
- Family Psychoeducation (availability)
- Services for National Guard Members/Families



Category III: Consumer & Family Empowerment

- Consumer & Family Test Drive (CFTD)
- Consumer & Family Monitoring Teams
- Consumer/Family on State Pharmacy (P&T) Committee
- Consumer-Run Programs (availability)
- Promote Peer-Run Services
- State Supports Family Education Programs
- State Supports Peer Education Programs
- State Supports Provider Education Programs



Category IV: Community Integration & Social Inclusion

- Housing - Overall Score
- Suspend/Restore Medicaid Post-Incarceration
- Jail Diversion Programs (availability)
- Reentry Programs (availability)
- Mental Illness Public Education Efforts
- State Supports Police Crisis Intervention Teams (CIT)
- Mental Health Courts - Overall Score
- Mental Health Courts - per capita

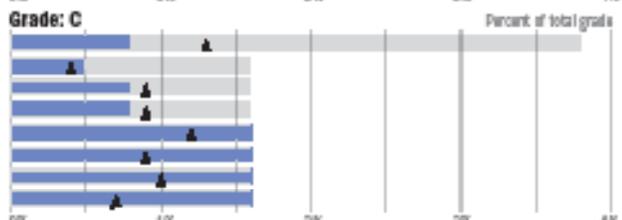


Table 3.1 NAMI's Grading the States 2009: Summary of State Grades

2006 Grade		2009 Grade	2009 Category Grades			
			I	II	III	IV
<i>D</i>	USA (mean)	<i>D</i>	<i>D</i>	<i>C</i>	<i>D</i>	<i>D</i>
<i>B</i>	Connecticut	<i>B</i>	<i>B</i>	<i>B</i>	<i>A</i>	<i>C</i>
<i>B</i>	Maine	(6 states)	<i>B</i>	<i>B</i>	<i>B</i>	<i>B</i>
<i>C</i>	Maryland		<i>B</i>	<i>B</i>	<i>B</i>	<i>C</i>
<i>C</i>	Massachusetts		<i>B</i>	<i>B</i>	<i>C</i>	<i>C</i>
–	New York		<i>C</i>	<i>B</i>	<i>B</i>	<i>C</i>
<i>D</i>	Oklahoma		<i>B</i>	<i>C</i>	<i>C</i>	<i>C</i>
<i>D</i>	Arizona	<i>C</i>	<i>D</i>	<i>B</i>	<i>B</i>	<i>C</i>
<i>C</i>	California	(18 states)	<i>B</i>	<i>C</i>	<i>D</i>	<i>B</i>
–	Colorado		<i>F</i>	<i>B</i>	<i>C</i>	<i>D</i>
<i>C</i>	DC		<i>D</i>	<i>B</i>	<i>D</i>	<i>C</i>
<i>C</i>	Hawaii		<i>D</i>	<i>B</i>	<i>D</i>	<i>D</i>
<i>C</i>	Minnesota		<i>D</i>	<i>C</i>	<i>C</i>	<i>D</i>
<i>C</i>	Missouri		<i>C</i>	<i>C</i>	<i>D</i>	<i>D</i>
<i>D</i>	New Hampshire		<i>C</i>	<i>C</i>	<i>D</i>	<i>D</i>
<i>C</i>	New Jersey		<i>C</i>	<i>C</i>	<i>B</i>	<i>D</i>
<i>C</i>	New Mexico		<i>C</i>	<i>C</i>	<i>F</i>	<i>D</i>
<i>B</i>	Ohio		<i>C</i>	<i>C</i>	<i>C</i>	<i>B</i>
<i>C</i>	Oregon		<i>C</i>	<i>B</i>	<i>F</i>	<i>B</i>
<i>D</i>	Pennsylvania		<i>D</i>	<i>C</i>	<i>C</i>	<i>D</i>
<i>C</i>	Rhode Island		<i>D</i>	<i>C</i>	<i>D</i>	<i>D</i>
<i>C</i>	Vermont		<i>C</i>	<i>C</i>	<i>C</i>	<i>D</i>
<i>D</i>	Virginia		<i>C</i>	<i>C</i>	<i>C</i>	<i>D</i>
<i>D</i>	Washington		<i>D</i>	<i>B</i>	<i>F</i>	<i>D</i>
<i>B</i>	Wisconsin		<i>D</i>	<i>B</i>	<i>C</i>	<i>D</i>
<i>D</i>	Alabama	<i>D</i>	<i>F</i>	<i>C</i>	<i>D</i>	<i>F</i>
<i>D</i>	Alaska	(21 states)	<i>D</i>	<i>C</i>	<i>F</i>	<i>F</i>
<i>C</i>	Delaware		<i>D</i>	<i>D</i>	<i>F</i>	<i>D</i>
<i>C</i>	Florida		<i>F</i>	<i>D</i>	<i>D</i>	<i>C</i>
<i>D</i>	Georgia		<i>D</i>	<i>C</i>	<i>C</i>	<i>C</i>
<i>F</i>	Idaho		<i>F</i>	<i>D</i>	<i>D</i>	<i>D</i>
<i>F</i>	Illinois		<i>D</i>	<i>C</i>	<i>C</i>	<i>D</i>
<i>D</i>	Indiana		<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>
<i>F</i>	Iowa		<i>D</i>	<i>D</i>	<i>F</i>	<i>D</i>
<i>F</i>	Kansas		<i>D</i>	<i>C</i>	<i>D</i>	<i>D</i>
<i>D</i>	Louisiana		<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>
<i>C</i>	Michigan		<i>F</i>	<i>B</i>	<i>D</i>	<i>D</i>
<i>F</i>	Montana		<i>F</i>	<i>C</i>	<i>D</i>	<i>F</i>
<i>D</i>	Nebraska		<i>F</i>	<i>D</i>	<i>F</i>	<i>F</i>
<i>D</i>	Nevada		<i>F</i>	<i>D</i>	<i>D</i>	<i>F</i>
<i>D</i>	North Carolina		<i>D</i>	<i>C</i>	<i>F</i>	<i>C</i>
<i>F</i>	North Dakota		<i>F</i>	<i>D</i>	<i>D</i>	<i>F</i>
<i>B</i>	South Carolina		<i>F</i>	<i>C</i>	<i>C</i>	<i>F</i>
<i>C</i>	Tennessee		<i>D</i>	<i>C</i>	<i>C</i>	<i>D</i>
<i>C</i>	Texas		<i>F</i>	<i>D</i>	<i>F</i>	<i>D</i>
<i>D</i>	Utah		<i>F</i>	<i>C</i>	<i>C</i>	<i>D</i>
<i>D</i>	Arkansas	<i>F</i>	<i>F</i>	<i>D</i>	<i>F</i>	<i>F</i>
<i>F</i>	Kentucky	(6 states)	<i>F</i>	<i>D</i>	<i>D</i>	<i>F</i>
<i>D</i>	Mississippi		<i>F</i>	<i>F</i>	<i>C</i>	<i>F</i>
<i>F</i>	South Dakota		<i>F</i>	<i>F</i>	<i>F</i>	<i>F</i>
<i>D</i>	West Virginia		<i>D</i>	<i>F</i>	<i>F</i>	<i>F</i>
<i>D</i>	Wyoming		<i>F</i>	<i>D</i>	<i>F</i>	<i>F</i>

Notes: The four categories are (I) health promotion and measurement; (II) financing and core treatment/recovery services; (III) consumer and family empowerment; and (IV) community integration and social inclusion. For more details on each state's results, see Chapter 5. Colorado and New York did not respond to NAMI's 2006 survey of state mental health agencies.

Section 4

STATE OF THE STATE HEALTH

Oklahoma's State of the State Health

Ron Woodson, MD, Board President and Terry Cline, PhD, Commissioner, State Department of Health

FOREWORD

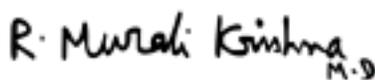
Thank you for taking time to read through our 2014 State of the State's Health Report. This report provides important information regarding the health status of the residents of Oklahoma.

First, we do have reason to celebrate! Our infant mortality and smoking rates have decreased – two critical measures of the health of our state. These positive outcomes result from an investment in evidence-based practices and approaches utilized by community coalitions, statewide organizations, and Oklahomans who are actively seeking health improvements for our state.

Even so, we continue to have many health status challenges. Our state ranks 44th in overall health status of its residents compared to the other states in the nation (1st is the best, 50th is the worst). We have a high prevalence of deaths due to heart disease, stroke, cancer, chronic lower respiratory disease, and diabetes. Unhealthy lifestyles and behaviors such as low physical activity and fruit and vegetable consumption, along with a high prevalence of smoking and obesity, contribute to most of today's leading causes of death.

Based upon these findings, it is essential to recognize that we each have a role in improving our state's health outcomes. Please join us as we work together to shape our future for the health of today's Oklahomans and for the generations to come.

Sincerely,



R. Murali Krishna, MD
President
Oklahoma State Board of Health



Terry L. Cline, PhD
Secretary of Health and Human Services
and Commissioner of Health

The 2014 State of the State's Health Report reveals ongoing challenges as well as signs of promise for improved health status. Based on the most current data available, there is reason to be hopeful as the Oklahoma State Department of Health and our many partners continue to focus on the key Oklahoma Health Improvement Plan flagship issues of tobacco use prevention, obesity, and children's health.

Areas of continued challenges include many of our mortality statistics. Overall, Oklahoma has the fourth highest rate of death from all causes in the nation, 23 percent higher than the national rate. Perhaps more disturbing is the fact that while Oklahoma's mortality rate dropped five percent over the past 20 years, the U.S. mortality rate dropped 20 percent. So, Oklahoma is not keeping up with the rest of the nation.

Specific leading causes of death that contribute to Oklahoma's high mortality rate include the following:

- Oklahoma has the 12th highest rate of death due to cancer in the nation.
- Oklahoma has the third highest rate of death due to heart disease in the nation.
- Oklahoma has the fourth highest rate of death due to stroke in the nation.

- Oklahoma has the highest rate of death due to chronic lower respiratory disease in the nation.
- Oklahoma has the fourth highest rate of death due to diabetes in the nation.
- Oklahoma had a nearly 60 percent increase in death due to unintentional injuries from 2000 to 2012.

Contributing to our high mortality rates are behavioral risk factors that disproportionately overburden Oklahomans. Areas of concern include the following:

- Oklahoma has the next to lowest rate of fruit consumption in the nation.
- Oklahoma has the 44th lowest rate of vegetable consumption in the nation.
- Oklahoma is the 44th least physically active state in the nation.
- Oklahoma has the sixth highest rate of obesity in the nation.
- Oklahoma's adult smoking rate in 2012, while better than the 26.1 percent in 2011, was 23.8 percent compared to 19.6 percent nationally.



Without question, there is much work to do to improve the health of our state. However, there are reasons for celebration. For example, Oklahoma is ranked 10th highest in the nation for the percentage of senior citizens who received flu vaccinations in 2012. This high rate of flu vaccination among Oklahoma's seniors represents lives saved.

Another area where Oklahoma is showing signs of improvement is infant mortality. Any death of a baby before the age of 1 is tragic and reducing the heartache felt by families impacted by infant mortality has been a priority of the Oklahoma State Department of Health. Because of intense, targeted programs like the "Preparing for a Lifetime" initiative, Oklahoma's infant mortality rate has dropped 10 percent since 2007. Programs like "Every Week Counts," which focuses on reducing pre-term deliveries, and community events like "A Healthy Baby Begins with You," promote prenatal care and are making a difference.

Other statewide initiatives such as the Million Hearts campaign seek to reduce cardiovascular disease deaths through improved blood pressure control. We also continue to work closely with key state partners, such as the Oklahoma Tobacco Settlement Endowment Trust on tobacco use prevention and nutrition and fitness initiatives. Finally, one of the most exciting developments over the past three years has been the exponential growth of the Certified Healthy Oklahoma activities. With continued support from the founding Certified Healthy partners (Oklahoma Turning Point Coalition, the State Chamber, the Oklahoma Academy, and the Oklahoma State Department of Health), the number of certified healthy businesses, schools, communities, campuses, and restaurants increased from 490 in 2011 to 1,146 in 2013! These certifications mean that communities are implementing policies to encourage increased fitness and decreased tobacco use. Businesses are creating work environments conducive to health. Schools are finding ways to bring healthy meals to students through farm-to-school nutrition programs and other healthy eating policies.

So, while we still have much work to do, there is cause for hope and celebration. Through our continued collaborative activities with partners such as local Turning Point coalitions, communities of faith, schools, businesses, community leaders, and our sustained focus on the Oklahoma Health Improvement Plan flagship issues, we will Create a State of Health.

STATE REPORT CARD

	U.S.	OK	GRADE
WORKFORCE			
WAGE (RATE PER 1,000)	6.1	7.8	D
TOTAL (RATE PER 100,000)	747.8	816.6	F
LEADING CAUSES OF DEATH			
(RATE PER 100,000)			
HEART DISEASE	178.1	236.2	F
MALIGNANT NEOPLASIA (CANCER)	172.8	181.3	D
CEREBROVASCULAR DISEASE (STROKE)	38.1	55.8	F
CHRONIC LOWER RESPIRATORY DISEASE	42.2	67.4	F
DIABETES	38.1	68.6	F
DIABETES	28.8	28.8	D
INFLUENZA/PNEUMONIA	16.1	18.7	D
ALZHEIMER'S DISEASE	26.1	28.1	C
DEMENTIA (EXCEPT ALZHEIMER)	15.3	15.8	C
UNCAUSED	12.1	18.6	D
DIABETES RATES			
DIABETES PREVALENCE	8.7%	11.6%	D
CURRENT SMOKING PREVALENCE	8.8%	18.2%	D
CANCER RISK SCORE (RATE PER 100,000)	488.5	468.9	C
RISK FACTORS & DELAYERS			
MINIMAL FRUIT CONSUMPTION	37.7%	68.2%	F
MINIMAL VEGETABLE CONSUMPTION	22.8%	28.8%	D
NO PHYSICAL ACTIVITY	22.8%	28.3%	D
CURRENT SMOKING PREVALENCE	18.8%	23.3%	D
OBESITY	27.8%	32.2%	D
IMMUNIZATIONS < 3 YEARS	71.8%	84.7%	D
DIABETES INFLUENZA VACCINATION	68.1%	87.8%	B
DIABETES PNEUMONIA VACCINATION	68.8%	74.8%	A
LOWEST ACTIVITY DAYS (HR)	2.8	3.8	D
POOR MENTAL HEALTH DAYS (HR)	3.8	4.2	C
POOR PHYSICAL HEALTH DAYS (HR)	4.8	4.4	D
GOOD OR BETTER HEALTH RATING	83.1%	81.8%	D
TREN FERTILITY (RATE PER 1,000)	16.4	22.8	D
HIGH THROUGHOUT PRENATAL CARE	73.1%	85.8%	F
LOW BIRTH WEIGHT	8.1%	8.4%	C
ADULT DENTAL VISITS	87.2%	88.8%	F
USUAL SOURCE OF CARE	77.8%	76.8%	C
OCCUPATIONAL FATALITIES	4.1	7.8	F
(RATE PER 100,000 WORKING)			
PREVENTABLE HOSPITALIZATIONS	882.1	818.8	D
(RATE PER 100,000)			
UNINSURED FACTORS			
NO INSURANCE	17.1%	18.8%	C
POVERTY	16.8%	17.2%	C

TOTAL MORTALITY

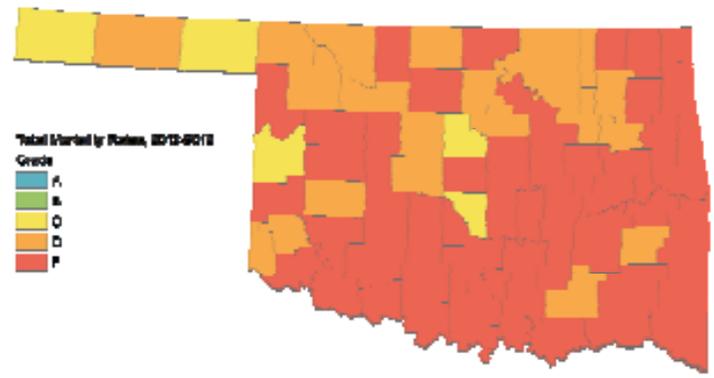
HISTORIC						
	2007	2008	2009	2010	2011	PROGRESS
	1	2	3	4	5	NO CHANGE
RATE PER 100,000						
	2007	2008	2009	2010	2011	GRADE
STATE COMPARISON						
US	780.3	747.8				C
KANSAS (best)	687.2	655.6				A
OKLAHOMA	938.0	938.5				F
MISSISSIPPI (worst)	NA	942				F
AGE IN YEARS						
18 - 24	115.0	102.4		100.8		A
25 - 34	148.7	148.7		154.7		A
35 - 44	264.9	268.3		282.4		A
45 - 54	580.3	572.8		583.8		A
55 - 64	1148.0	1348.9		1348.4		F
65+	2088.3	2088.8		2105.4		F
SEX						
MALE	1004.0	1068.4		1032.8		F
FEMALE	788.4	782.3		778.8		C
RACE/ETHNICITY						
WHITE (NH)	922.8	922.6		922.7		F
BLACK (NH)	1894.9	2082.8		2018.8		F
ASIAN/PACIFIC (NH)	107.8	1088.7		177.3		F
HISPANIC	475.2	478.3		538.1		A
EDUCATION						
< 9th	NA	NA		NA		NA
10 - 14th	NA	NA		NA		NA
15th - 17th	NA	NA		NA		NA
18th - 24th	NA	NA		NA		NA
25th +	NA	NA		NA		NA
ZIP CODE						
CENTRAL	873.2	898.7		954.3		D
NE	900.5	917.8		984.3		F
NT	844.3	898.7		813.1		D
SE	999.4	1088.7		951.8		F
SW	988.8	978.8		983.2		F
WLSA	918.1	948.3		982.3		D

Grades represent Oklahoma's ranking compared to the nation during a given year.
 1. The highest category (10000+ up to 100000) represents the change in grade between 2008 and 2012. It does not represent a statistically significant change in the rate.
 NA = Not Applicable

Oklahoma had the 4th highest rate of death from all causes in the nation.¹

- More than 36,500 Oklahomans died in 2012. As a result, Oklahoma's mortality rate was 23% higher than the national rate.²
- While the U.S. mortality rate dropped 20% over the last 20 years, Oklahoma's rate only decreased 5%.³
- In Oklahoma, men had a 34% higher death rate than women.⁴
- Unhealthy lifestyles and behaviors contribute to most of today's leading causes of death. Health risk factors include smoking, physical inactivity, and obesity.⁵
- Hispanic Oklahomans had a death rate that was approximately half that of other racial/ethnic groups in Oklahoma.⁶
- The mortality rate was lowest in the northwest region of the state.⁷
- The life expectancy at birth for Oklahomans in 2012 was 78.1 years.⁸
- The U.S. has seen life expectancy increase by 3.3 years (1990 to 2010) while Oklahoma has only seen an increase of 0.9 years over that same time.⁹
- Between 1990 and 2012 the life expectancy for Oklahoma women has essentially stayed the same (increase of 0.1 years) while men have seen an increase of 1.8 years.⁹
- Programs such as the Shape Your Future Initiative and the Oklahoma Health Improvement Plan (OHIP) are working to effect those behaviors that contribute to high mortality rates.

1. Centers for Disease Control and Prevention, National Center for Health Statistics, Compressed Monthly Ph 1998-2008, CDC WONDER On-line Database. Accessed at <http://wonder.cdc.gov/cmf-cd01.html>.
 2. Murphy SL, Xu JQ, Kochanek KJ. Deaths: Final data for 2010. National vital statistics reports: vol 61, no 4, statistical tables. NCHS, National Center for Health Statistics. 2010.
 3. Centers for Disease Control and Prevention, National Center for Health Statistics, Compressed Monthly Ph 1978-1998, CDC WONDER On-line Database. Accessed at <http://wonder.cdc.gov/cmf-cd01.html>.
 4. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, vital statistics 2012, on Oklahoma Statistics on Health Activities for Selected Diseases (2012SHARD). Accessed at <http://www.health.ok.gov/vital>.
 5. National Center for Health Statistics, Health, United States, 2012: With Special Feature on Strategies to Reduce Premature Mortality. NCHS. 2013.
 6. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information



HEART DISEASE DEATHS

Heart disease is the leading cause of death in Oklahoma.

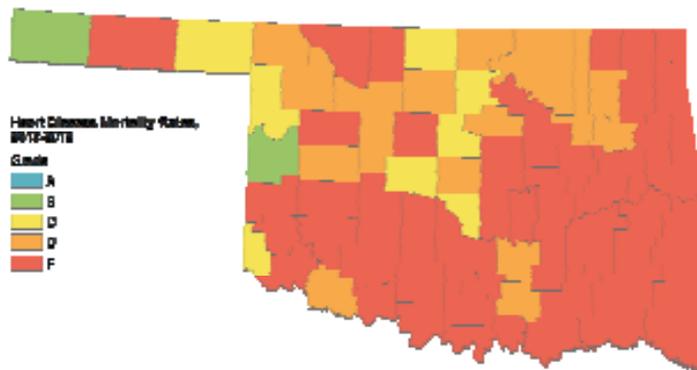
- In 2010, Oklahoma had the third highest death rate for heart disease in the nation.¹
- More than 9,000 Oklahomans died from heart disease in 2012.²
- Heart disease accounted for 1 in 4 Oklahoma deaths in 2012.²
- From 1999 to 2010, heart disease death rates decreased by 28% in Oklahoma and by 33% in the U.S.⁴
- The heart disease death rate was 50% higher among Oklahoma males than females in 2012.
- In 2012, heart disease death rates were highest among non-Hispanic Blacks and American Indians.
- In 2010 through 2012, the percent of premature deaths from heart disease (occurring in individuals under the age of 75) was 38% for non-Hispanic Whites, 58% for non-Hispanic Blacks, 56% for non-Hispanic American Indians, and 59% for Hispanics.²
- High blood pressure, high cholesterol, smoking, physical inactivity, obesity, poor diet, and diabetes are the leading causes of cardiovascular disease.³
- The Oklahoma State Department of Health is collaborating with partners across the state to promote health system changes as well as promoting community-clinical linkages in support of the Million Hearts® Initiative to reduce hypertension.
- The Chronic Disease Service has developed a Toolkit Trilogy⁴ to drive evidence-based preventive strategies to support decision-making to improve chronic diseases health outcomes.⁴

1. Chronic Disease in Oklahoma Data Book. Oklahoma State Department of Health, Chronic Disease Service. August 2013. Retrieved from <<http://www.ohhs.gov/health2/documents/CDB-Overview2013en180-001n.pdf>>.

2. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2012 to 2012. on Oklahoma Statistics on Health Available for Everyone (SHARE), Accessed at <<http://www.ohhs.org/SHARE>> on 08/04/2013 10:12:06.

3. Devereux, J.L., Longtin, L., and Shi A. (2002). Cardiovascular Disease. Rowington, P., Bennett, R., and Wagner, M. Chronic Disease Epidemiology and Control (pp. 689-726). Washington, DC: American Public Health Association.

4. www.ohhs.gov/HealthyDiseases_Prevention_Preparedness/Chronic_Disease_Service/Toolkit_Triology/Toolkit_Triology.html



NATIONS							
	2000	2005	2009	2006	2010	2012	PROGRESS
	1	2	3	4	5	6	
RATE PER 100,000							
	2007	2010	2012	GRADE			
STATE COMPARISON							
US	298.9	176.1		C			
MISSISSIPPI (lead)	329.9	118.4		A			
OKLAHOMA	342.8	236.2		E			
MISSISSIPPI (lead)	348.8	261.1		E			
AGE IN YEARS							
15 - 24	1.0	4.2	1.8	A			
25 - 34	26.9	14.8	18.9	A			
35 - 44	48.2	46.3	43.1	B			
45 - 54	152.9	128.9	136.2	C			
55 - 64	296.1	266.8	281.8	E			
65+	1508.8	1498.8	1296.1	E			
GENDER							
MALE	296.9	286.2	289.2	E			
FEMALE	298.8	182.4	179.4	C			
RACE/ETHNICITY							
WHITE (NH)	248.8	236.2	226.7	D			
BLACK (NH)	322.2	288.5	299.4	E			
AMER INDIAN (NH)	308.8	224.8	245.2	E			
HISPANIC	94.1	112.7	123.9	A			
SMOKE							
< 5% ⁵	NR	NA	NA				
5.1% - 24%	NR	NA	NA				
24.1% - 49%	NR	NA	NA				
50% - 74%	NR	NA	NA				
75%+	NR	NA	NA				
EDUCATION							
< HS	NR	NA	NA				
HS	NR	NA	NA				
HS+	NR	NA	NA				
CELLULAR COVERAGE							
NR	NR	NA	NA				
REGION							
CENTRAL	338.8	288.2	198.8	D			
NE	244.8	248.1	222.7	D			
NW	228.8	218.5	197.8	D			
SE	388.8	281.1	288.8	E			
SW	387.8	282.2	242.7	E			
TOTAL	228.2	224.2	213.0	D			

Grades represent Oklahoma's ranking compared to the nation during a given year.

5. The analysis excluding (smokers) or (smokers) does not account for the change in grade between 2000 and 2012; it does not represent a statistically significant change in the rate.

NR = Not Reported

MALIGNANT NEOPLASM (CANCER) DEATHS

REPORT
 2007 2008 2009 2010 2011 2012 PROGRESS

RATE PER 100,000
 2007 2011 2012 GRADE

STATE COMPARISON	2007	2011	2012	GRADE
US	173.4	172.8		C
UTAH (Best)	136.5	133.7		A
OKLAHOMA	196.9	191.3		D
KENTUCKY (Worst)	213.5	203.3		F

AGE IN YEARS	2007	2011	2012	GRADE
18-24	4.8	4.8	7.2	A
25-34	7.5	10.2	8.4	A
35-44	32.4	33.8	33.7	A
45-54	143.5	157.1	143.7	A
55-64	371.0	391.8	344.8	F
65+	1183.4	1081.7	1018.2	F

GENDER	2007	2011	2012	GRADE
MALE	245.8	234.8	224.2	F
FEMALE	132.9	133.3	133.8	B

RACE/ETHNICITY	2007	2011	2012	GRADE
WHITE (79%)	201.8	198.3	191.7	D
BLACK (9%)	229.8	232.8	228.5	F
AMER INDIAN (7%)	175.5	213.8	198.8	D
HISPANIC	96.8	82.8	84.5	A

INCOME	2007	2011	2012	GRADE
< \$20k	NA	NA	NA	
\$25 - 24k	NA	NA	NA	
\$25k - 49k	NA	NA	NA	
\$50 - 74k	NA	NA	NA	
\$75+	NA	NA	NA	

EDUCATION	2007	2011	2012	GRADE
< HS	NA	NA	NA	
HS	NA	NA	NA	
HS+	NA	NA	NA	
COLLEGE GRADUATE	NA	NA	NA	

REGION	2007	2011	2012	GRADE
CENTRAL	187.1	181.5	182.1	D
NE	200.4	201.8	197.5	F
SW	189.7	193.8	171.1	C
SE	215.4	204.8	192.8	D
W	208.0	197.8	184.4	D
TOTAL	200.9	179.8	181.2	D

CURRENT SMOKING PREVALENCE

REPORT
 2007 2008 2009 2010 2011 2012 PROGRESS

PERCENT
 2011 2012 GRADE

STATE COMPARISON	2011	2012	GRADE
US	21.2	19.8	C
UTAH (Best)	11.8	10.8	A
OKLAHOMA	26.1	23.3	D
KENTUCKY (Worst)	28.8	26.3	F

AGE IN YEARS	2011	2012	GRADE
18-24	26.1	25.8	F
25-34	33.8	28.4	F
35-44	28.8	28.4	F
45-54	33.1	28.8	F
55-64	23.3	21.8	D
65+	11.7	10.8	A

GENDER	2011	2012	GRADE
MALE	26.1	24.4	D
FEMALE	26.3	23.2	D

RACE/ETHNICITY	2011	2012	GRADE
WHITE (79%)	26.8	23.7	D
BLACK (9%)	38.7	23.5	D
AMER INDIAN (7%)	33.8	29.2	F
HISPANIC	18.1	22.5	D

INCOME	2011	2012	GRADE
< \$20k	47.8	48.4	F
\$25 - 24k	34.2	32.3	F
\$25k - 49k	24.8	23.3	D
\$50 - 74k	18.2	18.8	D
\$75+	14.8	15.8	A

EDUCATION	2011	2012	GRADE
< HS	42.7	38.8	F
HS	28.4	25.8	F
HS+	24.8	21.8	D
COLLEGE GRADUATE	18.7	19.2	A

REGION	2011	2012	GRADE
CENTRAL	25.8	19.2	C
NE	26.2	25.8	F
SW	25.1	24.2	D
SE	28.2	25.3	F
W	27.8	25.3	F
TOTAL	26.4	19.2	C

Physical Health Metrics in Oklahoma County

Gary Cox, JD and Alicia Meadows, MPH, MBA, Oklahoma City-County Health Department

Physical Health is a single component of the complex intersection of Wellness which considers mental, emotional, social and physical health.

The Oklahoma City-County Health Department (OCCHD) began measuring Wellness in 2010 with the original release of the Wellness Score. The updated score, released in 2014, reflects a more robust analysis of the aggregate of health outcomes, as well as an opportunity to meaningfully engage in discussions and strategy implementation that focuses on place-based response and prioritization of health improvement.

In collaboration with the Physical Activity & Nutrition workgroup of the Wellness Now coalition, the OCCHD has laid the groundwork for expanding innovative policy and programmatic responses to this complex community problem.

To improve the health of Oklahomans, we must consider strategies that incorporate a technical package to engage policy, systems and environmental responses in a strategic and targeted way. Technical packages are a combination of programs, policies and marketing communication intended to influence a specific health outcome, for example obesity. This requires alignment of agendas and resources across the state, but especially within our metro regions of Oklahoma City and Tulsa, where two-thirds of our state population live.

Obesity has been, and will continue to be, one of the primary contributors of chronic disease and related poor health outcomes.

Combating obesity is a multi-generational effort that involves total community engagement of multiple sectors, specifically, engaging public and private sectors. The Wellness Now coalition recently launched the Wellness Now Business Alliance. Imbedded as a component of the overall

coalition, the Business Alliance focuses on the role of private business as leaders in community health improvement through investment of financial and human resources. The Alliance recognizes that good health is good for business, and the priority for its inaugural year is to actively recruit and engage businesses in projects that better the health of the communities where businesses are located.

A healthy community is an altruistic goal, but it is also a business goal; a healthy community drives down health insurance costs, attracts young and vibrant families, and aids in the development of a pool of productive and educated workforce. Improving physical health, inevitably, depends on securing funding and resources that create active, livable communities, as well as the ability to develop and implement health-focused policy at the local level. The OCCHD has been heavily engaged in the development of local policy specifically addressing livable communities through the passage of the City of Oklahoma City Complete Streets ordinance, and more recently, the urban agriculture ordinance.

OCCHD also works with local school districts to implement complete nutrition and physical activity policies, examples include Oklahoma City and Luther Public Schools. Policy implementation is a low-cost approach to improving health outcomes; however, it must be paired with effective programming and communication. Targeted programming and communication can be costly and unsustainable if not approached with clear goals in mind, and objectives that can be linked easily to measurable improvements.

Wellness Now has developed a clear health improvement plan that provides this overview for all coalition members.

The OCCHD and Wellness Now coalition have identified several actions for consideration as we determine solutions to address the decline in health status of all Oklahomans.



OKLAHOMA COUNTY

Mortality and Leading Causes of Death

- Oklahoma County ranked 33rd in the state for total mortality (age-adjusted).
- The leading causes of death in Oklahoma County were heart disease, cancer and chronic lower respiratory disease.
- The infant mortality rate in Oklahoma County was 27% higher than the national rate.

Disease Rates

- Oklahoma County cancer incidence was one of the highest in the state, 16% higher than the national rate.
- At 11.4%, Oklahoma County had the worst rate of adult asthma in the state.

Risk Factors, Behaviors and Socioeconomic Factors

- Nearly 1 in 3 adults (32%) was obese in Oklahoma County.
- Nearly 1 in 2 adults (49%) ate at least one piece of fruit each day and approximately 1 in 4 adults (28%) ate at least one vegetable each day.
- Oklahoma County was ranked near the bottom in the state (70th) for both the percentage of adults without health insurance (22%) and the percentage of adults with a usual source of healthcare (70%).
- Nearly 1 in 5 people in Oklahoma County lived in poverty (19%).
- Nearly 1 in 5 adults reported 3+ days of limited activity in the past month (19%).
- Approximately 1 in 4 adults reported 4+ days of poor physical health (24%) and 4+ days of poor mental health (25%) in the previous month.

Changes from Previous Year

- The infant mortality rate improved by 12% from the previous year.
- The rates of death due to Alzheimer's disease and chronic lower respiratory disease worsened by 34% and 11% respectively.
- The rate of occupational fatalities worsened by 43%.

	PREVIOUS	CURRENT	GRADE
MORTALITY			
INFANT (RATS PER 1,000)	9.8	7.8	D
TOTAL (RATE PER 100,000)	893.3	968.4	F
LEADING CAUSES OF DEATH			
(RATE PER 100,000)			
HEART DISEASE	201.0	238.8	D
MALIGNANT NEOPLASM (CANCER)	180.9	204.5	D
CHRONIC LOWER RESPIRATORY DISEASE (ASTHMA)	83.5	49.6	F
CHRONIC LOWER RESPIRATORY DISEASE	57.1	49.3	F
UNINTENTIONAL INJURY	45.9	62.8	D
DIABETES	28.8	22.5	C
ARTERIO/SCLEROSIS	20.0	36.7	C
ALZHEIMER'S DISEASE	20.0	28.8	C
HEPATIC (LIVER) DISEASE	15.1	36.4	E
SUICIDES	14.5	17.6	D
DISEASE RATES			
DIABETES PREVALENCE	11.3%	11.6%	D
CURRENT ASTHMA PREVALENCE	30.8%	11.4%	F
CANCER INCIDENCE (RATE PER 100,000)	644.2	622.3	F
RISK FACTORS & BEHAVIORS			
MINIMAL FRUIT CONSUMPTION	8%	49.1%	F
MINIMAL VEGETABLE CONSUMPTION	8%	27.8%	D
NO PHYSICAL ACTIVITY	31.3%	28.3%	D
CURRENT SMOKING PREVALENCE	28.7%	28.8%	D
OBESITY	30.9%	32.1%	D
IMMUNIZATIONS < 3 YEARS	86.7%	78.8%	C
SEASONAL INFLUENZA VACCINATION	85.2%	94.4%	B
SEASONAL PNEUMONIA VACCINATION	71.0%	78.4%	B
LIMITED ACTIVITY DAYS (30+)	17.8%	19.3%	D
POOR MENTAL HEALTH DAYS	19.8%	28.8%	D
POOR PHYSICAL HEALTH DAYS	17.0%	24.4%	D
OBES OR OBESITY HEALTH STATUS	75.8%	31.2%	F
TOTAL FERTILITY (RATE PER 1,000)	38.0	32.1	F
FIRST THRESHOLD PHYSICIAN CARE	81.3%	49.4%	D
LOW BIRTH WEIGHT	8.3%	8.7%	C
ADULT MENTAL HEALTH	66.7%	48.4%	D
USUAL SOURCE OF CARE	70.4%	70.2%	D
OCCUPATIONAL FATALITIES (RATE PER 100,000 WORKERS)	2.9	3.3	C
PREVENTABLE HOSPITALIZATIONS (RATE PER 100,000)	1734.3	2093.8	C
SOCIOECONOMIC FACTORS			
NO HEALTH INSURANCE COVERAGE	28.3%	22.3%	D
POVERTY	19.2%	19.2%	D

- **Local Policy and Ordinances:** Impacting physical health outcomes through policy will have to occur at the local level through city councils, school boards, neighborhood alliances and other local policy making bodies. Wellness Now has successfully supported and advocated for policies such as complete nutrition and physical activity policies in public school districts, urban agriculture and complete streets as strategies for improving physical activity and access to affordable produce.

Plans to engage the local Board of Health and the Wellness Now coalition in making comprehensive tobacco policy recommendations to the OKC city council to include smoking ordinances in multi-family housing are currently underway. Other policy examples include prohibition of tobacco in all indoor and outdoor properties owned by municipalities in Oklahoma County.

These efforts do not require significant investment of financial resources.

- **Creative Incentives for Business Investment:** The Wellness Now Business Alliance is the first attempt by Wellness Now and OCCHD to specifically and strategically target private businesses to leverage and expand financial resources for community health improvement.

The vision of the Business Alliance is to create a culture of health with business leaders at the forefront. The incentives for private-public partnerships are hampered by the difficulty of philanthropic giving to local units of government.

Oklahoma could use the taxation system to incentivize and simplify the process of private business investing in community health infrastructure by developing tax codes that provide credits or benefits to businesses that provide funding or other tangible resources directly to local government for the purpose of improving community health.

- **Incentivize Partnerships between Local Health Department and Public School Districts:** Education is the number one indicator of health status later in life, and improving access to quality education begins with ensuring students and their families are healthy and able to actively participate in the education process.

The state could strategically engage in local efforts to develop and implement community school models that integrate health and social services into the school environment by rewarding schools that allow Local Health Departments to integrate health promotion and education efforts into the school day through additional professional and training days or through allocation of state funds to financially support the effort.

- **Incentivize Partnerships between Local Health Departments and Private Hospital and Clinical Settings:** Integration of public health principles into private medical care provision is a critical missing link for efficiently and effectively managing population health changes and appropriately assessing and allocating scarce resources.

If Oklahoma expects to meaningfully develop a coordinated system of care, it must include the local health department in that discussion. Local health departments have the expertise to keep patients from inappropriately using healthcare services through targeted case finding and case management.

Using public health to support resource allocation decisions and improve overall quality care is a relatively inexpensive opportunity to improve the business solvency of private providers while concurrently meeting the demands for improved access to appropriate health services in a timely manner.

Section 5

PREMATURE DEATH DATA

Premature Death Data 1968-2010

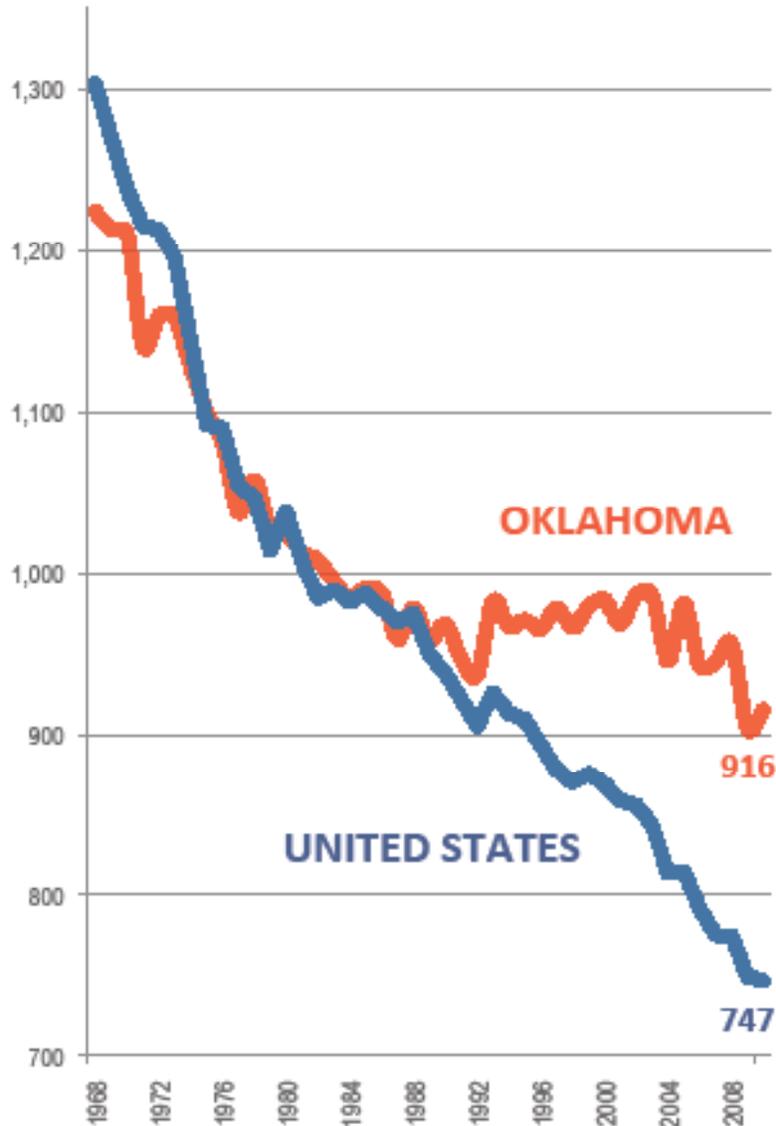
Deaths per 100,000 people adjusted for age. Source: Centers for Disease Control Wonder Database

1968			2010			Change	
1	HI	1,138.9	1	HI	589.6	New York	51%
2	MN	1,151.0	2	CA	646.7	Hawaii	48%
3	NE	1,151.3	3	OH	652.9	District of Columbia	48%
4	UT	1,154.4	4	MN	661.5	New Hampshire	48%
5	SD	1,157.0	5	NY	665.5	New Jersey	48%
6	OR	1,157.2	6	MA	674.9	Massachusetts	48%
7	ND	1,163.0	7	CO	682.7	Connecticut	47%
8	CA	1,177.7	8	NH	690.4	Maryland	47%
9	KS	1,179.9	9	NI	691.1	Virginia	46%
10	ID	1,189.9	10	WA	692.3	Illinois	46%
11	IA	1,192.3	11	AZ	693.1	Vermont	46%
12	FL	1,202.4	12	FL	701.1	Pennsylvania	45%
13	WI	1,216.6	13	UT	703.2	Delaware	45%
14	MT	1,223.0	14	ND	704.3	California	45%
15	OK	1,224.4	15	SD	715.1	Rhode Island	45%
16	CO	1,228.1	16	NE	717.8	Maine	45%
17	AZ	1,231.4	17	VT	718.7	Washington	45%
18	OH	1,239.5	18	WI	719.0	Colorado	44%
19	WA	1,248.6	19	IA	721.7	Arizona	44%
20	TX	1,250.5	20	RI	721.7	Nevada	43%
21	NM	1,264.5	21	OR	723.1	Minnesota	43%
22	AR	1,269.5	22	ND	728.6	South Carolina	42%
23	AK	1,282.6	23	ID	731.6	Florida	42%
24	MA	1,287.7	24	IL	736.9	North Carolina	41%
25	WY	1,294.8	25	VA	741.6	Wisconsin	41%
26	RI	1,309.3	26	NM	749.0	New Mexico	41%
27	MO	1,310.0	27	ME	749.6	Michigan	40%
28	MI	1,320.5	28	MT	754.7	Ohio	40%
29	TN	1,325.8	29	KS	762.2	Wyoming	40%
30	NI	1,326.5	30	PA	765.9	Alaska	40%
31	VT	1,327.8	31	DE	769.9	Iowa	39%
32	IN	1,328.2	32	AK	771.5	North Dakota	39%
33	NH	1,329.6	33	TX	772.3	Georgia	39%
34	ME	1,333.6	34	WY	778.8	Utah	39%
35	KY	1,355.9	35	MI	786.2	Hawaii	39%
36	OH	1,356.6	36	DC	792.4	Montana	38%
37	AL	1,359.7	37	NV	795.4	Texas	38%
38	NY	1,361.3	38	NC	804.8	Indiana	38%
39	IL	1,365.6	39	OH	815.7	South Dakota	38%
40	NC	1,368.6	40	ND	819.5	Nebraska	38%
41	MD	1,370.5	41	IN	820.6	Oregon	38%
42	VA	1,376.8	42	GA	845.4	Louisiana	37%
43	NV	1,384.2	43	SC	854.8	Missouri	37%
44	GA	1,392.9	44	TN	890.8	Kansas	35%
45	WV	1,401.0	45	AR	892.7	Mississippi	35%
46	PA	1,401.7	46	LA	903.7	West Virginia	33%
47	DE	1,408.1	47	KY	915.0	Tennessee	33%
48	LA	1,405.5	48	OK	915.5	Kentucky	33%
49	MS	1,472.5	49	WV	933.6	Alabama	31%
50	SC	1,477.2	50	AL	939.7	Arkansas	30%
51	DC	1,526.4	51	MS	962.0	Oklahoma	25%
	US	1,303.6		US	747.0	NATIONAL	43%

The Oklahoma rates have improved 25% - less than any other state!

Oklahoma & United States (1968-2010)

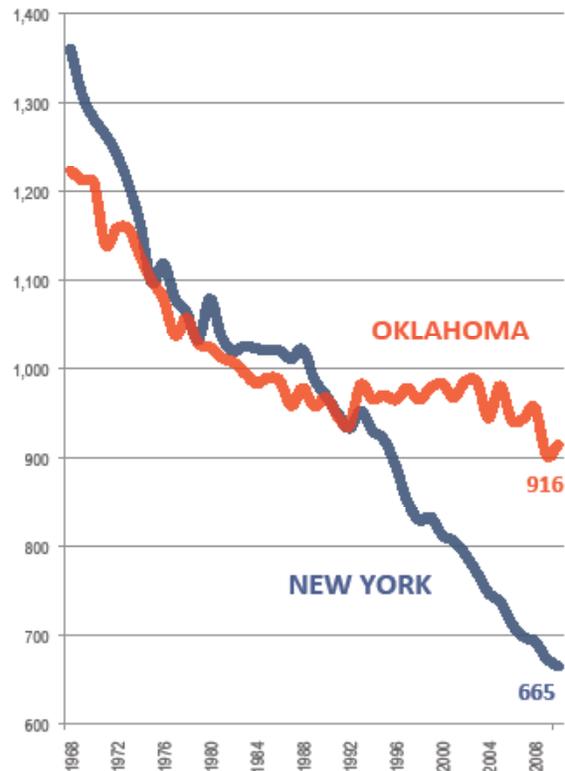
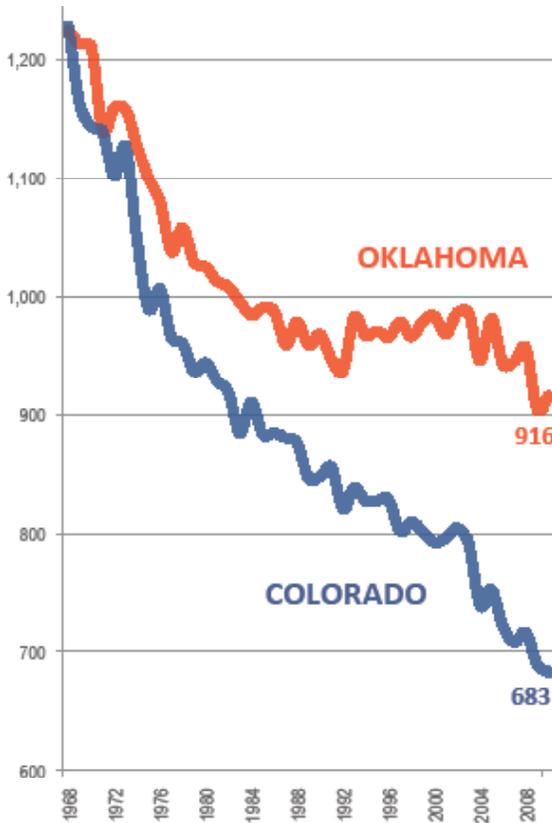
Deaths per 100,000 people adjusted for age. Source: Centers for Disease Control Wonder Database



In 1968, Oklahoma had a age adjusted (premature) death rates much better than the nation. Since that time the country has improved 43% while Oklahoma improved only 25%. Oklahoma departed from national trends in about 1990. Although the reasons are many, there is no doubt that the economic, social and demographic trauma of the Oil Bust of the 1980's was a major factor.

Colorado & New York (1968-2010)

Deaths per 100,000 people adjusted for age. Source: Centers for Disease Control Wonder Database



COLORADO

In 1968, Oklahoma and Colorado has identical age adjusted (premature) death rates. Since that time Colorado has improved enormously and now has the seventh lowest rate in the nation. Oklahoma currently has one of the highest rates. The reasons are many but surely include the fact that Oklahomans were much slower in adopting changed their individual and population health behavior changes.

NEW YORK

In 1968, Oklahoma had a age adjusted (premature) death rates much better than New York .Since that time New York has improved more than any other state, and Oklahoma has improved the least. and now has the seventh lowest rate in the nation. Oklahoma currently has one of the highest rates.

AADR Change (1982-2012) in Oklahoma Counties

OK2SHARE Database, Oklahoma State Department of Health

COUNTIES IN ALFA ORDER

COUNTY	1982	1992	2002	2012	Change
1 Adair	1,341.2	1,092.6	1,295.3	1,019.7	-24%
2 Alfalfa	1,061.9	791.5	848.2	934.7	-12%
3 Atoka	1,118.9	866.9	989.3	906.4	-19%
4 Beaver	906.7	828.6	720.0	718.4	-21%
5 Beckham	920.4	1,024.1	1,057.7	997.5	8%
6 Blaine	1,122.5	894.3	1,079.0	951.8	-15%
7 Bryan	1,077.5	855.5	893.2	887.6	-18%
8 Caddo	1,024.2	1,040.2	1,133.1	1,059.0	3%
9 Canadian	881.6	866.5	877.0	785.9	-11%
10 Carter	996.7	997.9	1,115.2	1,041.7	4%
11 Cherokee	1,066.4	888.3	1,001.3	967.8	-9%
12 Choctaw	1,274.8	983.4	1,015.4	1,165.1	-8%
13 Cimarron	876.5	1,123.4	1,179.0	1,018.7	16%
14 Cleveland	966.6	845.6	827.2	760.0	-23%
15 Coal	1,194.4	899.0	986.7	944.3	-21%
16 Comanche	1,085.1	965.1	978.5	897.8	-17%
17 Cotton	886.9	996.1	790.4	1,006.4	13%
18 Craig	1,189.7	1,033.4	999.0	1,014.6	-15%
19 Creek	1,045.6	964.9	1,074.5	997.1	-5%
20 Custer	945.9	996.2	1,135.1	915.7	-3%
21 Delaware	916.8	981.6	989.8	947.2	3%
22 Dewey	887.5	935.1	812.8	980.1	10%
23 Ellis	1,003.7	895.0	831.3	834.4	-17%
24 Garfield	1,010.6	839.8	1,025.8	867.8	-12%
25 Garvin	928.4	882.5	1,004.1	1,058.4	14%
26 Grady	938.9	889.5	970.2	946.2	1%
27 Grant	814.6	924.6	915.2	928.4	14%
28 Greer	1,048.1	979.5	973.8	889.0	-15%
29 Harmon	1,290.7	904.2	1,092.8	739.6	-43%
30 Harper	1,063.2	1,045.6	1,215.9	907.7	-15%
31 Haskell	977.1	1,199.2	1,234.4	811.9	-17%
32 Hughes	967.4	954.9	1,100.5	1,136.9	16%
33 Jackson	1,069.7	849.1	936.1	974.4	-9%
34 Jefferson	1,062.4	1,054.1	1,188.2	1,156.3	7%
35 Johnston	968.0	995.2	1,167.6	971.6	0%
36 Kay	1,040.4	930.4	1,056.4	889.5	-16%
37 Kingfisher	887.2	868.0	891.7	782.7	-12%
38 Kiowa	1,114.4	1,033.2	1,147.1	1,149.3	3%
39 Latimer	866.6	1,100.6	985.5	903.0	4%
40 LeFlore	1,123.5	1,071.6	1,086.1	968.2	-12%
41 Lincoln	935.7	839.8	1,001.8	879.3	-6%
42 Logan	1,022.2	908.1	975.6	869.6	-34%
43 Love	1,133.4	870.3	887.4	834.6	-26%
44 Major	926.6	906.3	886.0	896.9	-3%
45 Marshall	1,106.4	948.6	1,000.3	897.1	-19%
46 Mayes	1,062.2	1,000.2	1,020.1	1,047.9	-3%
47 McClain	908.4	915.0	975.7	892.0	-2%
48 McCurtain	1,292.7	1,073.0	1,047.5	975.1	-25%
49 McIntosh	1,106.8	966.6	1,006.1	946.1	-15%
50 Murray	969.9	993.3	1,263.7	870.0	-11%
51 Muskogee	1,106.7	1,065.1	1,051.6	1,017.2	-8%
52 Noble	977.3	893.9	949.9	849.3	-13%
53 Nowata	966.2	939.3	984.1	962.6	0%
54 Okfuskee	1,060.5	1,038.9	1,065.6	1,135.9	7%
55 Oklahoma	1,016.5	965.6	989.9	886.3	-13%
56 Okmulgee	1,064.7	1,042.7	1,029.9	1,062.3	0%
57 Osage	870.7	724.4	754.0	722.9	-17%
58 Ottawa	1,119.1	1,048.6	989.8	1,051.0	-6%
59 Pawnee	1,079.1	955.0	993.6	1,048.5	-3%
60 Payne	923.4	749.3	906.3	793.3	-14%
61 Pittsburg	978.9	895.4	984.9	976.7	0%
62 Pontotoc	1,001.3	918.5	1,083.0	956.8	-6%
63 Pottawatomie	1,006.4	972.8	1,029.4	936.6	-7%
64 Pushmataha	1,024.6	1,079.3	917.5	837.5	-18%
65 Roger Mills	694.6	828.9	558.4	647.7	-7%
66 Rogers	889.8	879.4	912.4	759.2	-15%
67 Seminole	1,114.0	1,040.9	1,025.4	1,029.7	-6%
68 Sequoyah	1,177.0	1,102.4	1,092.0	943.5	-20%
69 Stephens	942.9	775.1	1,005.5	1,002.1	6%
70 Texas	1,046.9	847.0	809.7	717.9	-31%
71 Tillman	1,039.0	995.3	891.3	999.0	-4%
72 Tulsa	1,005.2	919.4	974.1	862.3	-14%
73 Wagoner	782.3	806.2	724.0	789.2	1%
74 Washington	929.7	815.6	844.8	782.5	-16%
75 Washita	917.2	820.6	806.6	842.3	-8%
76 Woods	964.6	769.5	902.6	882.3	-8%
77 Woodward	952.7	940.5	885.8	812.9	-15%
STATEWIDE	1,006.8	933.9	980.3	890.5	-12%

COUNTIES BY PERCENT REDUCTION

COUNTY	1982	1992	2002	2012	Change
1 Harmon	1,290.7	904.2	1,092.8	739.6	-43%
2 Logan	1,022.2	908.1	975.6	869.6	-34%
3 Texas	1,046.9	847.0	809.7	717.9	-31%
4 Love	1,133.4	870.3	887.4	834.6	-26%
5 McCurtain	1,292.7	1,073.0	1,047.5	975.1	-25%
6 Adair	1,341.2	1,092.6	1,295.3	1,019.7	-24%
7 Cleveland	966.6	845.6	827.2	760.0	-23%
8 Beaver	906.7	828.6	720.0	718.4	-21%
9 Coal	1,194.4	899.0	986.7	944.3	-21%
10 Sequoyah	1,177.0	1,102.4	1,092.0	943.5	-20%
11 Marshall	1,106.4	948.6	1,000.3	897.1	-19%
12 Atoka	1,118.9	866.9	989.3	906.4	-19%
13 Pushmataha	1,024.6	1,079.3	917.5	837.5	-18%
14 Bryan	1,077.5	855.5	893.2	887.6	-18%
15 Comanche	1,085.1	965.1	978.5	897.8	-17%
16 Osage	870.7	724.4	754.0	722.9	-17%
17 Haskell	977.1	1,199.2	1,234.4	811.9	-17%
18 Ellis	1,003.7	895.0	831.3	834.4	-17%
19 Kay	1,040.4	930.4	1,056.4	889.5	-16%
20 Washington	929.7	815.6	844.8	782.5	-16%
21 Craig	1,189.7	1,033.4	999.0	1,014.6	-15%
22 Blaine	1,122.5	894.3	1,079.0	951.8	-15%
23 Greer	1,048.1	979.5	973.8	889.0	-15%
24 Rogers	889.8	879.4	912.4	759.2	-15%
25 Woodward	952.7	940.5	885.8	812.9	-15%
26 Harper	1,063.2	1,045.6	1,215.9	907.7	-15%
27 McIntosh	1,106.8	966.6	1,006.1	946.1	-15%
28 Tulsa	1,005.2	919.4	974.1	862.3	-14%
29 Payne	923.4	749.3	906.3	793.3	-14%
30 Noble	977.3	893.9	949.9	849.3	-13%
31 Oklahoma	1,016.5	965.6	989.9	886.3	-13%
32 Garfield	1,010.6	839.8	1,025.8	867.8	-12%
33 LeFlore	1,123.5	1,071.6	1,086.1	968.2	-12%
34 Alfalfa	1,061.9	791.5	848.2	934.7	-12%
35 Kingfisher	887.2	868.0	891.7	782.7	-12%
STATEWIDE	1,006.8	933.9	980.3	890.5	-12%
36 Murray	969.9	993.3	1,263.7	870.0	-11%
37 Canadian	881.6	866.5	877.0	785.9	-11%
38 Cherokee	1,066.4	888.3	1,001.3	967.8	-9%
39 Jackson	1,069.7	849.1	936.1	974.4	-9%
40 Choctaw	1,274.8	983.4	1,015.4	1,165.1	-9%
41 Woods	964.6	769.5	902.6	882.3	-9%
42 Muskogee	1,106.7	1,065.1	1,051.6	1,017.2	-8%
43 Washita	917.2	820.6	806.6	842.3	-8%
44 Ottawa	1,119.1	1,048.6	989.8	1,051.0	-8%
45 Seminole	1,114.0	1,040.9	1,025.4	1,029.7	-8%
46 Pottawatomie	1,006.4	972.8	1,029.4	936.6	-7%
47 Roger Mills	694.6	828.9	558.4	647.7	-7%
48 Lincoln	935.7	839.8	1,001.8	879.3	-6%
49 Creek	1,045.6	964.9	1,074.5	997.1	-5%
50 Pontotoc	1,001.3	918.5	1,083.0	956.8	-4%
51 Tillman	1,039.0	995.3	891.3	999.0	-4%
52 Major	926.6	906.3	886.0	896.9	-3%
53 Custer	945.9	996.2	1,135.1	915.7	-3%
54 Mayes	1,062.2	1,000.2	1,020.1	1,047.9	-3%
55 Pawnee	1,079.1	955.0	993.6	1,048.5	-3%
56 McClain	908.4	915.0	975.7	892.0	-2%
57 Nowata	966.2	939.3	984.1	962.6	0%
58 Okmulgee	1,064.7	1,042.7	1,029.9	1,062.3	0%
59 Pittsburg	978.9	895.4	984.9	976.7	0%
60 Johnston	968.0	995.2	1,167.6	971.6	0%
61 Grady	938.9	889.5	970.2	946.2	1%
62 Wagoner	782.3	806.2	724.0	789.2	1%
63 Kiowa	1,114.4	1,033.2	1,147.1	1,149.3	3%
64 Delaware	916.8	881.6	989.8	947.2	3%
65 Caddo	1,024.2	1,040.2	1,133.1	1,059.0	3%
66 Latimer	866.6	1,100.6	985.5	903.0	4%
67 Carter	996.7	997.9	1,115.2	1,041.7	4%
68 Stephens	942.9	775.1	1,006.5	1,002.1	6%
69 Jefferson	1,062.4	1,054.1	1,188.2	1,156.3	7%
70 Okfuskee	1,060.5	1,038.9	1,065.6	1,135.9	7%
71 Beckham	920.4	1,024.1	1,057.7	997.5	8%
72 Dewey	887.5	935.1	812.8	980.1	10%
73 Cotton	886.9	996.1	790.4	1,006.4	13%
74 Grant	814.6	924.6	915.2	928.4	14%
75 Garvin	928.4	882.5	1,004.1	1,058.4	14%
76 Cimarron	876.5	1,123.4	1,179.0	1,018.7	16%
77 Hughes	967.4	954.9	1,100.5	1,136.9	18%

Section 6

YOUNG OKLAHOMANS

ACE: The Ticking Time Bomb

Anne Roberts, Director of Legislative Affairs, INTEGRIS Health, Oklahoma City



Childhood Stress:

A Ticking Time Bomb

Findings of the Adverse Childhood Experiences (ACEs) Study

For decades, child advocates have known that children who suffer from abuse and neglect are more prone to a myriad of emotional and developmental challenges. We have discovered that for some children, the pain and rage of childhood can turn inward, and lead to maladjustments in adulthood. For other children, the pain and rage turn outward, and lead to violent behaviors. In Oklahoma, untreated child abuse and neglect may have played a significant role in two major crises: one of the highest occurrences of mental illness in the nation ¹, and the fourth largest prison population per capita of any state ².

A new study now adds an additional element to this mix, and provides even more motivation to invest in the health and well-being of our children. The Adverse Childhood Experiences, or ACEs, Study ³, is showing a direct correlation between the traumas and family dysfunction suffered in childhood with poor adult health status decades later. This may help explain why Oklahoma ranks so poorly in health indicators. In fact, Oklahoma was the only state in the nation whose health status got worse during the 1990s, and has not improved significantly in recent years ⁴.

The Study

The ACEs study is a collaborative research project of the Centers for Disease Control and Prevention (CDC) and the Department of Preventive Medicine at Kaiser Permanente (KP) in San Diego. The study was prompted by the observations of Dr. Vincent J. Felitti in the 1980s, as he was conducting a weight loss program at Kaiser Permanente. He noticed that some of the patients who were most successful at losing weight were dropping out of the program. In follow-up interviews with over

200 of these patients, he made a series of startling discoveries: child sexual abuse was very common among these patients, and always preceded the onset of their problem with obesity. In addition, many patients indicated their conscious awareness of an association between their childhood abuse and their current obesity. Finally, and perhaps most counterintuitive, Dr. Felitti reported that for many of these patients, obesity was not their problem – it was their protective solution, a way to deal with problems they could not talk about.

From these clinical observations, Dr. Robert Anda at the CDC designed the research protocols that would compare current adult health status to childhood experiences decades earlier. With the help of over 17,000 members of the KP Health Plan, who agreed to cooperate through detailed biomedical and psychological evaluations, the ACEs study produced remarkable insight into how our experiences as children evolve into risky behaviors, which, in turn, evolve into disease and death.

The Population

The study group consisted of typical, middle class, employed adults with health insurance, more or less evenly divided between males and females. Because the average participant was 57 years old, the study had the ability to measure the effect of adverse childhood experiences on adult health status a half-century later.

ACE Risk Factors

The ACE Study identified ten risk factors, or adverse childhood experiences, that were frequently mentioned in the weight program. Five ACEs were related to abuse or neglect of the child:

- recurrent physical abuse
- recurrent emotional abuse
- sexual abuse
- emotional neglect
- physical neglect



The other five ACEs related to dysfunction within the household where the child was growing up:

- alcoholism and/or substance abuse
- depression or mental illness
- domestic violence
- imprisoned household member
- loss of a parent /divorce or abandonment

The study constructed a “score” by which to analyze the findings: a person exposed to none of the 10 factors had an ACE Score of 0; a person exposed to any four factors had an ACE Score of 4, and so on.

The ACE Study revealed that more than half of this average, middle-class population had experienced one or more of the ten categories of adverse childhood experiences. One in four experienced two ACEs; one in 16 experienced four ACEs. So the study was able to assess the relationship of co-occurring traumatic or stressful experiences in childhood to mental and physical disease in adults.

Findings

Some of the findings of the study affirmed the long-held belief that risk factors do not occur in isolation, but are interrelated and appear in clusters. If a child lives in a home where domestic abuse occurs, for example, it is unlikely that the rest of the household functions well. In fact, the ACEs study found that given an exposure to one adverse childhood experience, there is an 80% likelihood of exposure to another. This finding suggests that studying each risk factor separately might lead to limited understanding of the true burdens carried by children into their adult lives.

Other findings were more surprising. The ACE study concluded that adverse childhood experiences are much more common than recognized or acknowledged, and that they have a powerful relationship to adult health status half a century later.

The higher the ACE score, i.e. the greater number of harmful experiences suffered by a child, the higher likelihood that the child will adopt risk behaviors as a means to cope or cover their pain. Such behaviors are linked to the chronic diseases that are the most common causes of death and disability in the country, including heart disease, cancer, stroke, diabetes and mental illness.

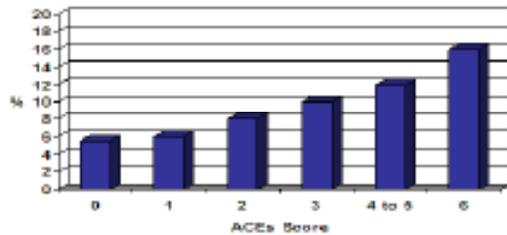
The ACE Pyramid represents the conceptual framework for the Study⁵. It demonstrates how the study assesses the “scientific gaps” about the underlying reasons for risk behaviors that lead to health and social consequences higher up the pyramid. The pyramid on the right demonstrates a possible real life scenario.

Implications

Traditionally, reports concerning the causes of disease link problem behaviors, such as tobacco use, with the resulting consequences, such as lung cancer. You will find a relationship between the use of seat belts and the motor vehicle death rate; between lack of prenatal care and infant mortality; between lack of physical activity and high blood pressure and stroke.

Our response to these findings has been to educate the public to change their behaviors – to quit smoking, wear seat belts, and get moving.

ACEs and Current Smoking



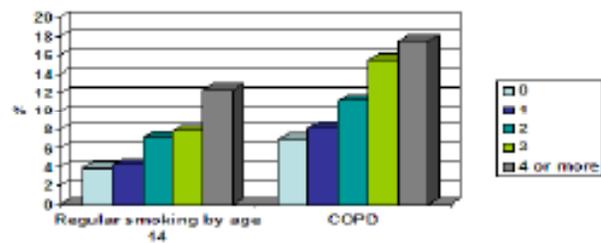
Yet the ACEs study indicates that what we view as problem behaviors, such as tobacco use, may indeed be solution behaviors to people trying to comfort themselves and cope with trauma. The study found a direct and graded association between the number of ACEs in a person's history and incidents of regular smoking. The higher the ACEs score, the higher the likelihood of current smoking, and the earlier onset of taking up the habit. Smoking underlies some of the most prevalent causes of death in America, such as chronic obstructive pulmonary disease (COPD) and heart disease. This is just one example of the direct relationship between ACEs, risk behaviors and disease.

For years, public health campaigns have attempted to reduce smoking by asking people to change their behaviors. These efforts have been successful with people who took up the habit for social reasons. But the ACEs study suggests that for some people, smoking is a form of self-medication, and our efforts to reduce their consumption will not be successful without first understanding and dealing with the underlying reason for their behavior. This finding requires a different kind of response from the medical, public health and social sciences communities.

Conclusion

It is apparent from the ACEs study that time does not heal the wounds of childhood. Additionally, many of the adverse childhood experiences may go undetected because of shame, secrecy and social taboo, preventing young victims from revealing their trauma. Yet without intervention

ACEs, Smoking and COPD



and treatment, the study projects a predictable path toward disease and disability. Further, the connection to future rates of mental illness and incarceration paint a daunting picture for Oklahoma.

The findings from this study make it imperative that Oklahoma invest in its young children and families, that we provide appropriate interventions for young people, and that we create new diagnostic tools and training for health professionals. Otherwise, with our current levels of divorce, child abuse, domestic violence and substance abuse, Oklahoma is sitting on a ticking time bomb.

End Notes

1. SAMHSA: Center for Behavioral Health Statistics and Quality, *National Survey on Drug Use and Health, 2011 (Revised October 2013)*
2. *Oklahoma Department of Corrections, 2014*
3. *The Relationship of Adverse Childhood Experiences to Adult Health: Turning Gold into Lead. Clinical Contributions, Vincent J. Felitti, MD. The Permanente Journal, 2002.*
4. *State of the State's Health Report, A Lifetime of Prevention. Oklahoma State Department of Health, 2004.*
5. *Centers for Disease Control and Prevention, Division of Adult and Community Health, 2006. The Adverse Childhood Experiences CDC Website: <http://www.cdc.gov/NCCDPHP/ace/index.htm>*

ACE v2.0 - Brain Health

Robert W. Block, MD, FAAP, OU School of Community Medicine, Tulsa



When Drs. Felitti and Anda published the ACE studies, the association between childhood adversities and subsequent health and well-being among adults became irrefutably clear, but the reason for the remarkable findings was unknown. In 2014, we now have information to explain their findings. **The answer lies in two fields, neuroscience and epigenetics.**

Neuroscience focusing on the body's physiologic reaction to stress indicates that unrelenting stress unabated by resilience-building support from parents and other caring adults causes hormonal, cellular, anatomic, and other changes in the human brain. Scientific research in this area has focused on stress related hormones, cortisol and norepinephrine as examples, and the ways they influence brain development.

Epigenetics is a specialized area of genetic research, exposing how toxic stress, along with other insults to the body, changes the expression of genes. Epigenetic research has also focused on the telomere, the tail end of a chromosome that may determine the life and expression of genes on that chromosome. It suggests that toxic stress can change the way a person's genetic composition is expressed, possibly creating serious health problems for individuals, and for their offspring as the altered chromosomes and/or genes are passed on to next generations.

Because of its simplicity, a simple phrase can lead us to an understanding of the social determinates of, and the lifespan effects on health. That phrase is, "all adults once were children." Ignoring children's well-being; their parents, home environment, poverty effects, neighborhood and community violence, poor education, poor access to health care, and other factors create children with **brain health issues** that escalate as they mature. Who we are as adults, our health and our successes, is largely determined by what happened to us as children, mitigated by resiliency if we learned along the way how to manage stress.

Notice the use of the term "brain health." The popular vernacular speaks to "mental health," isolating the brain as if it were not one of many body organs, and is often thought of as a failure of some sort inherent to the affected person.

The term, mental health, began in the U.S. in the mid-1800s as "mental hygiene." The implication was clear: if a person did not think and function in a clean, hygienic manner, the cause of their condition was their moral fault.

The term morphed into mental health, continuing the false belief that diseases of the brain were somehow different from other diseases.

This false notion allowed a continuing stigmatization against persons with brain health problems, allowed health insurance companies to refuse or limit health care for brain diseases, and created an inexplicable duplication of resources as both federal and state agencies emerged as departments of health, and separate departments of mental health and substance abuse, as is the case in Oklahoma.

The challenge for today is clear. The brain is not only an organ in the body as are the heart, lungs, liver, and others, it is conductor of the body's orchestra. The brain's functioning is pivotal to the functioning of other organs, and is critical to successful development of a human being, beginning in utero and continuing throughout life.

So we must learn about toxic stress, epigenetics, and other contributors to suboptimal brain health; and apply that knowledge to develop more complete health systems.

We are now beyond ACE, and linking cause to effects will enable us to improve health and well-being, at a cost that is substantially lower than the "fix what's broken" approach we use today.

ACE v3.0 - Ending Toxic Stress

Robert W. Block, MD, FAAP, Past President, American Academy of Pediatrics



In June, 2014, the American Academy of Pediatrics (AAP) hosted a symposium in Washington DC to announce a new project focused on brain health. The new Center for Healthy and Resilient Children will evolve into a major project area for the AAP, an organization with over 63,000 members dedicated to the health of all children (www.aap.org).

As stated in the preceding chapter on “Beyond ACEs,” new and evolving science provides credence for focusing on the young, developing child by providing alternatives to toxic stress, a continuing condition that adversely affects brain development and health. The AAP hopes to create collaboration between its focus on health care for infants, children, adolescents and young adults, with other groups concerned with child and family support.

Oklahoma has an active State Chapter of the AAP (OKAAP), with pediatrician members in both large urban areas, and to a lesser extent in smaller towns and

rural areas. The hope is for educational materials, programs to support children and families, and a new focus on combating stress while supporting effective education, supportive environments, and optimal health will enable pediatricians, working with other thought leaders in Oklahoma, to improve conditions for our children.

Resiliency is a variable in determining a person’s reaction to stress. We know that resiliency develops if children experience and effectively handle some stress and as they witness others successfully handling stress. If stress continues without supportive parents and other adults guiding a child through adverse experiences, the subsequent brain and other health issues can be devastating. This is why the Center’s tag line includes both

building stronger families and ending toxic stress.

The Harvard Center on the Developing Child has been working in the areas of family and child development for a number of years. The federal Agency for Children and Families has been focused on programs for both national and state initiatives supporting children and their families, as have numerous other agencies. One purpose of the Center will be to collate data from numerous projects, filter for effectiveness and provide resources for dissemination of the most successful approaches to creating stronger families and their children.

The health implications for adults are myriad, including cardiovascular, pulmonary, endocrine, neurological, brain and other diseases.



Prevention efforts in the past have focused on diet, activity, medications, and alternative health and lifestyle programs, but very little attention has been paid to preventing

toxic stress and developing resiliency – now known to be very important factors influencing health. The Center, with a governing board of pediatricians and an advisory board of professionals from a variety of related interest areas, will focus attention and planning on prevention of, and early intervention in toxic situations.

Oklahoma faces real challenges in education, health care delivery, poverty, and other measures of economic success and quality of life. The state will make progress in these areas when we learn how to identify and support children who live in adverse circumstances, and when we have the courage to put resources into prevention and early intervention. The AAP and its new Center, working with Oklahoma leaders, will help.

ACE v4.0 - The Academy on Violence and Abuse

Robert Block, MD, FAAP, Past President and Member of Board of Directors, AVA



The mission of the Academy on Violence and Abuse (AVA) is to advance health education and research on the recognition, treatment and prevention of the health effects of violence and abuse. This will be accomplished by:

- Fostering and advancing best science regarding the relationship of violence and abuse to health and its prevention, identification, and care
- Accelerating translation of best science to practice
- Developing and widely promulgating competencies and standards that define quality care
- Improving the abilities/skills of all health care professionals to deliver compassionate, quality care.

The vision of the AVA is that the prevention of violence and abuse, as well as its identification and care, is fully integrated into the delivery of quality healthcare so that people of all ages are safer and healthier.

Oklahoma is well positioned to meet the challenge of the AVA mission as stated above.

The AVA Mission Statement emphasizes prevention, identification and care around the issue of violence and abuse. The emphasis on fully integrating that concept into health care delivery is consistent with what we now know in 2014 about the ACE, toxic stress, neuroscience, and epigenetics. To not follow the mission and vision guidelines in health care education and practice would be as foolhardy as not immunizing children against vaccine-preventable disease, or not controlling Hemoglobin A1C in patients with known diabetes.

On a more positive note, integrating the new sciences, community resources, access to quality health care with an emphasis on prevention and early intervention will create a healthier population, especially when the process begins during fetal, neonatal, and the first few years of a child's life.

“Hidden Costs in Health Care: The Economic Impact of Violence and Abuse,” is a report from the AVA indicating a frightening cost to ignoring the effects of violence and abuse. Data in the paper indicate an incremental cost of \$333-750B, or 17 – 37.5% of total health care dollars can be attributed to care for conditions related to violence and abuse.

“Competencies Needed by Health Professionals for Addressing Exposure to Violence and Abuse in Patient Care,” is a carefully crafted educational outline for determining competencies applicable to all health professionals. Both papers and other information, including public videos of important professional talks are available: www.avahealth.org In order to accomplish the work of the AVA, as well as the previously described AAP Center, health professionals will need collaboration from educators, business leaders, policy makers, community leaders, parents, and others.

To recognize the importance of **brain health** and the threat to optimal brain health by ignoring the effects of toxic stress and childhood adversities (as well as adversities at play in adult life) would be foolhardy. States that recognize the importance of prevention and early intervention will rise in many measures, many of which now rank Oklahoma in the lowest quartile.

What we learn from Beyond ACE v2, v3 and v4 is that the time is ripe for attention to brain health, to the inclusion of both physical and “mental” health into one focus on health, and to acknowledge that all adults once were children.

As thought leaders for Oklahoma, the opportunity to incorporate new health and economic data into future planning is at hand. The results will be a stronger and more secure population supporting the development of the state.

Recommended reading: [Why Zebras Don't Get Ulcers](#), ed. 3, Robert Sopolosky

Schools for Healthy Lifestyles

Mac McCrory, EdD., John Bozalis, MD and Michael Crutcher, MD, MPH

Mac McCrory, Ed.D. Executive Director, Schools for Healthy Lifestyles. 500 N. Broadway, ste 225, Oklahoma City, OK 73102, 405-996-8428, 405-606-8437 (fax). mac@healthyschoolsok.org

John R. Bozalis, M.D., Chairman of the Board of Directors, Schools for Healthy Lifestyles; retired Physician, Oklahoma Allergy and Asthma Clinic, 750 Northeast 13th Street, Oklahoma City, OK 73104. jbozalis@cox.net

James M. Crutcher, M.D., MPH. Director of Medical Quality, Variety Care, 3000 N. Grand Blvd. Oklahoma City, OK 73107; jcrutcher@varietycare.org. President of the Board of Directors, Schools for Healthy Lifestyles;

The Need

Oklahoma consistently ranks near the bottom of the country in terms of overall health status. Almost a quarter of our population smokes and about one-third of Oklahomans are obese. Despite having a host of recreational opportunities, lengthy growing season for fruits and vegetables, and abundance of sunny days in our state, Oklahomans rank near the bottom in consumption of fruits and vegetables and regular participation in physical activity. As a result, we experience higher rates of heart disease, stroke, diabetes, hypertension and other chronic diseases than most other states.

These problems are generational and cultural; they often have causes rooted in poverty but also cross socio-economic lines; and they are made worse by fast-food marketing schemes and the huge influence that “screen time” has on decreasing levels of physical activity.

Also, many Oklahoma parents abuse prescription and other drugs and engage in risky behaviors; many Oklahoma parents are teen mothers or are otherwise uninformed about factors that promote good health.

Solutions

Changing these behaviors and resultant poor health outcomes is a very complex challenge and it is obvious that there is no single or easy solution. A long-term and multi-faceted approach is needed to address the problem. One thing that virtually everyone agrees on, however, is that we have to start as early as possible in a child’s life to promote the adoption of healthy lifestyles that will increase the likelihood that they will experience good health as adults. Health and wellness is not only a quality of life issue for the individual, but also has tremendous economic consequences for our state.

Expert educators agree that children have formed the majority of their lifelong habits by age 12, which makes elementary schools an optimal place to start teaching and promoting healthy lifestyles. The importance of physical education and activity in schools was recently emphasized in an Institute of Medicine report (1) that concluded that the benefits of physical activity outweigh the benefits of exclusive use of classroom time for academics, and that the earlier in life this important health behavior can be ingrained, the greater the benefits. The report recommended that schools should provide high-quality curricular physical education during which the students should spend at least half of the class-time engaged in vigorous or moderate-intensity physical activity. All elementary school students should spend an average of 30 minutes per day and all middle and high school students an average of 45 minutes per day in physical education class.

Schools for Healthy Lifestyles

Schools for Healthy Lifestyles (SHL) was founded in 1997 by Dr. John Bozalis, then president of the Oklahoma County Medical Society (OCMS). Dr. Bozalis recognized the critical need of health promotion in schools to combat the state’s worsening health statistics, and also desired that OCMS and physicians play a central role in that effort. Dr. Bozalis asked a group of concerned

citizens to help him start SHL; the original board of directors included Donna Nigh, Gene Rainbolt, Stan Hupfeld, Jean Gummerson, and Lou Kerr. Eight Oklahoma City Public Schools participated in the program that first year. Today, SHL boasts 62 elementary schools from 26 districts and 18 counties, and its programs impact over 30,000 Oklahoma families.

The mission of Schools for Healthy Lifestyles is to promote and maintain healthy lifestyle choices in Oklahoma through preventive, community-based school health education programs for students, their families, and faculty. Improved health is accomplished by teaching young children the value of healthy living and demonstrating how healthy lifestyles can be achieved for a lifetime. Key areas addressed in the program include nutrition, physical activity, injury prevention, tobacco use prevention and oral health education. The ultimate goal is to decrease the impact of our state's leading public health problems, including diabetes, heart disease, stroke, cancer, and injuries. SHL utilizes a collaborative public-private partnership to accomplish these goals; prominent partners have included the Oklahoma County Medical Society, the Oklahoma State Department of Health, the Oklahoma State Department of Education, and the Oklahoma City-County Health Department.

The program is voluntary. Interested elementary schools submit applications and selected schools send representative to an annual Summer Health Institute conducted by SHL. The Institute provides classroom materials and intensive training on developing healthy behaviors. SHL also conducts several events during the year that provide teachers highly specialized training in the latest children's health and fitness programs.

Each school implements site-specific plans to promote healthy lifestyles. The plans are designed to develop and strengthen school, family, and community partnerships. SHL provides yearly grants to each school to help implement their plans. First year schools also receive up to \$5000 for equipment and supplies, allowing them to invest in such health-related items as walking trails, playground

equipment, fitness & sports equipment, nutrition education, and health curriculum computer programs. Schools follow a tiered approach, and each year implements a new program component, ultimately covering all SHL focus areas.

Results

Annual program evaluation is a major area of emphasis. Student physical fitness assessments (Fitnessgram) and health surveys measuring knowledge, attitudes and behaviors are the primary means of evaluation. Both are performed at the beginning and end of the school year to measure change. Independent analysis of these metrics for approximately 5000 4th and 5th graders is performed annually through contract with the University of Oklahoma Department of Pediatrics. The most recent results of this analysis have shown significant improvements in the following areas:

- Physical fitness scores (Fitnessgram)
- Self-reported physical activity levels
- Nutritional knowledge
- General health knowledge
- General attitudes, and behavior
- Consumption of fruits and vegetables

Conclusions

Oklahoma is one of the unhealthiest states in the U.S., which adversely affects the welfare of individuals and the state as a whole. Our poor health status is due primarily to chronic diseases that are the result of unhealthy lifestyles—primarily tobacco use, poor diet, lack of physical activity, and abuse of alcohol and other drugs. Any attempt to improve the health of our state must include efforts to encourage healthy behaviors, especially among children. Schools for Healthy Lifestyles is dedicated to the mission of assuring that all children have the knowledge and skills necessary to live healthy and productive lives.

References

1. "Educating the Student Body: Taking Physical Activity and Physical Education to School". Institutes of Medicine Advising the Nation. May 2013.

Physical Fitness: Miracle-Gro for the Brain

Thomas Wesley Allen, DO, MPH, University of Oklahoma School of Community Medicine

Introduction

Oklahoma public education is like the weather – many people complain about it but few know how to improve it. This proposal provides a measurable and meaningfully method to improve academic performance. It is to use improved physical fitness to improve academic achievement. This proposal is to intelligently install physical fitness oriented physical education/performance into every Oklahoma public and private school in such a manner as to optimize academic performance. This proposal is to increase academic performance “faster – better – cheaper” ... and permanently.

All too often, school administrations look upon the school day as a zero sum of contact hours. To improve academic performance, physical education/fitness hours are reduced – and academic hours increased. The results have been little to no academic improvement. This false trade-off ignores the catalyst of intelligently organized physical fitness on academic performance. Who says?

- The Robert Wood Johnson Foundation says. Their studies show there is no evidence that increased classroom time results in improved test scores; and that allocating time for daily PE does not adversely impact academic achievement. Students whose time in PE or school-based physical activity was increased maintained or improved their grades and scores on standardized achievement tests, even though they received less classroom instructional time than students in control groups.
- Additionally, five controlled experiments – in the United States, Canada and Australia – have evaluated the effects on academic performance of allocating additional instructional time for PE. All five studies clearly demonstrate that physical activity does not need to be sacrificed for academic achievement.
- A study conducted in 2006 with 214 sixth-grade students in Michigan found that students enrolled in PE had similar grades and standardized test scores as students who were not enrolled in PE, despite receiving 55 minutes less of daily classroom instruction time for academic subjects.

Learning Readiness Physical Education

The solution to our frequently mediocre test results is clear. A simple new approach to learning through a physical fitness orientation could work wonders here in Oklahoma. This new approach to PE has an impact that educators are just now beginning to recognize and appreciate. This impact is on the brain and learning. It is called Learning Readiness Physical Education [LRPE]. LRPE is now part of the curriculum in a growing number of elementary and high schools throughout the nation. In every school, inner-city, suburban or rural, where LRPE is a part of the curriculum ...

- Academic achievement improved
- Absenteeism decreased
- Discipline incidents decreased
- Students’ physical fitness improved and
- Obesity rates declined.

Learning Readiness Physical Education focuses on students’ individual FITNESS, as contrasted with traditional team sports activity, during physical education classes. This PE is not your parents’ PE, where the best athletes got to play while others often simply stood around or sat and watched. No, this PE gets every student involved in and responsible for his and her personal fitness.

The key is simple. It is to exercise until each student’s heart rate is increased to a prescribed level over several minutes.

Students regularly run a mile at a predetermined heart rate during the PE class several times a week. Then they are then more prepared to learn in their subsequent classes. Students are also permitted, even encouraged, to take activity breaks during class! Get up out of one’s seat and ride the stationary bicycle in the back of the classroom!

NAPERVILLE

An example of the impact of Learning Readiness Physical Education comes from Naperville, Illinois. The new physical fitness education was described by its director, Paul Zientarski, in his recent visit to Tulsa. The results attained by Zientarski's students are enviable. Gym class has transformed the student body of 19,000 into perhaps the fittest in the nation.

In a single class of sophomores, only 3 per cent were overweight, compared to the national average of 30 percent. Their PE program has also turned those students into some of the smartest in this country.

In 1999 Naperville's eighth graders were among some 230,000 students from around the world who took an international standards test called TIMSS (Trends in International Mathematics and Science Study), which evaluates knowledge in math and science. In recent years, students in China, Japan and Singapore have outpaced American kids in these crucial subjects, but Naperville is the conspicuous exception: when Naperville's students took the TIMSS, they finished first in the world in science and sixth in math!

TULSA

The Tulsa Public School Administration has enthusiastically supported the introduction of Learning Readiness Physical Education and has selected the McClain 7th Grade academy as the initial school to begin the program. The administration of the Academy is also enthused to begin. We recommended that an observational trial of the LRPE begin with the program described in the following pages.

SUMMARY

This proposal is to intelligently install a physical fitness oriented PE into every Oklahoma public and private school in such a manner as to optimize academic performance. This proposal is to increase academic performance "faster – better – cheaper" ... and permanently.

- Faster – the results will be immediate.
- Better – the program is based upon empirical bioscience evidence not academic theory
- Cheaper – the programs are enhanced by affordable technology and are not labor intensive.



OBESITY

HISTORY: 2004 (A) 2006 (A) 2008 (A) 2009 (C) 2011 (B) 2012 (B) **PROGRESS:**

	PERCENT		
	2011	2012	GRADE
RACE/ETHNICITY			
WH	27.8	27.8	C
COLONIAN (non)	28.7	28.8	A
COLONIAN	31.1	32.2	D
NC (non)	33.4	34.7	F
AGE IN YEARS			
18 - 24	19.7	25.2	B
25 - 34	29.4	31.8	D
35 - 44	40.8	36.8	F
45 - 54	32.7	37.8	F
55 - 64	37.4	36.6	F
65+	24.8	28.8	C
SEX			
MALE	30.8	33.1	F
FEMALE	31.8	31.8	D
RACE/ETHNICITY			
WHITE (WH)	30.4	31.8	D
BLACK (WH)	34.8	45.5	F
AMER INDIAN (WH)	40.8	37.6	F
HISPANIC	23.4	30.8	C
INCOME			
< \$20k	33.2	35.8	F
\$15 - 24k	30.8	36.8	F
\$25k - 49k	33.8	32.8	D
\$50 - 74k	32.8	34.3	F
\$75+	28.8	28.3	C
EDUCATION			
< HS	31.8	31.8	D
HS	31.8	33.8	F
HS+	31.8	34.8	F
COLLEGE GRADUATE	24.8	26.8	B
REGION			
CENTRAL	29.8	31.8	D
NE	31.8	33.3	F
WT	29.1	33.8	F
SE	37.4	36.7	F
SW	31.2	32.4	D
TULSA	28.1	28.8	D

NO PHYSICAL ACTIVITY

HISTORY: 2004 (F) 2006 (F) 2008 (F) 2009 (F) 2011 (F) 2012 (B) **PROGRESS:**

	PERCENT		
	2011	2012	GRADE
RACE/ETHNICITY			
WH	24.2	22.8	C
COLONIAN (non)	19.8	18.3	A
COLONIAN	31.2	28.3	D
AMERIANS (non)	30.8	31.6	F
AGE IN YEARS			
18 - 24	17.8	17.8	B
25 - 34	27.4	18.4	B
35 - 44	27.4	26.8	D
45 - 54	33.4	30.8	F
55 - 64	33.4	33.8	F
65+	40.8	38.8	F
SEX			
MALE	30.7	27.8	D
FEMALE	31.7	28.1	F
RACE/ETHNICITY			
WHITE (WH)	30.8	27.7	D
BLACK (WH)	28.2	28.6	D
AMER INDIAN (WH)	29.8	28.1	D
HISPANIC	33.4	37.2	F
INCOME			
< \$20k	33.4	37.1	F
\$15 - 24k	34.8	36.3	F
\$25k - 49k	34.1	30.4	F
\$50 - 74k	23.8	22.8	C
\$75+	19.8	14.1	A
EDUCATION			
< HS	42.8	42.8	F
HS	37.7	33.6	F
HS+	27.8	24.2	C
COLLEGE GRADUATE	19.1	14.3	A
REGION			
CENTRAL	29.8	26.1	D
NE	32.8	28.1	F
WT	30.8	28.7	F
SE	32.8	33.8	F
SW	34.7	30.8	F
TULSA	27.1	27.3	D

Our Next Generation's Health

Kaitlyn MacGregor, Health Corps

Our next generation, the youth of Oklahoma, are facing an epidemic that threatens their current and future health, happiness and livelihood. Over one third of the teens in Oklahoma are overweight or obese, a factor that can become the cause of extensive physical and mental health challenges.

Excess weight in adolescents has been linked to high blood pressure, cardiovascular disease, type 2 diabetes, joint complications and psychological problems including poor self-esteem and depression.

Continuing to be overweight or obese can exacerbate the aforementioned physical and mental health issues causing chronic illness, low quality of life and even death.

HealthCorps, with our partners, has recognized how significant the challenge is to change adolescent habits around health and wellness.

Our program places Coordinators, recent college graduates that dedicate two years to the program, into high-need high schools to serve as peer-mentors and deliver a progressive curriculum in nutrition, exercise and mental strength.

Our work in Oklahoma extends into three schools, Ada High School, Ardmore High School and ASTEC High School, where coordinators with health backgrounds in fields such as exercise science, health promotions and behaviors, and pre-med lead unique in-school and community programming designed to foster physical and mental fitness.

By placing a Coordinator in a high school we make available a designated advocate that can focus on

breaking down barriers to better the health and wellness of the students, a program that has seen incredible success in Oklahoma and across the nation.

Oklahoma Coordinators have helped create school-wide wellness policies, hosted health fairs to engage students and staff in healthy lifestyles, and organized after-school clubs that teach students to cook healthy dishes, try new physical activities and create lessons to teach back to their friends and fellow students.

While we have seen positive changes in the schools and communities we are able to affect, we recognize that there are many adolescents in schools that are currently beyond our reach.

There are several steps that can be taken to expand the work HealthCorps is doing in Oklahoma high schools and communities, including building partnerships with local organizations working on sustainable health and wellness education projects, making health and physical education core subjects statewide, and improving school recreation facilities to make health and wellness activities and clubs accessible to the students and the community.

By building partnerships with local organizations that have both the monetary and educational resources necessary to support school health and/or physical education classes we can increase student access and engagement in a variety of health and wellness lessons and activities. HealthCorps Coordinators have shown us that by working with the community and building relationships with local organizations from the minute they walk into their new schools, we can create forward movement toward increased health and wellness.



By collaborating with other groups we are able to give students access to a variety of experts from yoga instructors to nutritionists and professional chefs to mental wellness coaches. Like most of us students want to be engaged and interested in what they are doing, and by creating a network of local organizations within districts and around schools we can encourage students to find the health and wellness tools that work for them and will help change their health habits. This is an easy, but often overlooked component because it takes time on the administrative side to implement such a partnership, but in our experience the outcome is worth the initial investment.

Making health and physical education core subjects is also a crucial change necessary to improve the health culture of the state because today's adolescents are Oklahoma's future. The actions of these adolescents, their healthy or unhealthy choices, can affect not only their lives, but also those of their parents, families and communities.

Physical wellness is only half the reason to connect students with the crucial education found in health and physical classes because they will affect the mental wellness of students as well.

Many studies support that increased physical activity and better health improve classroom performance and attendance as well as decreasing behavioral issues. While academic classes are indeed important to furthering the education of a state's youth we can not choose to ignore the significant role that their health and wellness plays in increasing their ability to focus and succeed.

As an important component of a whole education, the funding for making health and physical education classes mandatory should be part of the state's education budget by either reallocating funds or working with local districts to coordinate on a public/private mixed funding plan that would make use of grants, taxes and other alternate funding opportunities. In addition to making it

a state mandate, the state should advocate for their representatives in D.C. to make it a national initiative.

Improving school recreation facilities is also an important step toward building a healthy school and community. Without access to facilities and equipment students will be limited in the types of physical activities they can try and participate in. Little or no outdoor active space and poorly maintained or inaccessible indoor space make it challenging for students, staff and the community to continue to work on their health and wellness.

We have seen successful partnerships create high quality recreation space that is shared use, making it available for use by both students and community members. Projects such as this work well when local and state government, community organizations and schools can come together to create a cohesive plan that preserves student safety while increasing access to recreation space by the community.

This also unlocks the opportunity for students to become advocates for physical activity in their communities – encouraging family and friends to join them in a pick-up basketball game or for a walk around the track. Projects such as this would again be best funded through a mix of public and private funding.

We can make Oklahoma a healthier state by focusing our attention on educating the next generation in health and wellness and helping provide them the tools and facilities to put their education into action. This is the generation with the ability to impact everyone around them from parents to siblings and further into their communities. Not only will educated adolescents change their own lives, but they will also become advocates for better health among their families and within their communities, bringing a much-needed spirit to combat the obesity epidemic.

Are Education Policies Killing Us?

Lauren Brookey, Vice President of External Affairs, Tulsa Community College

Evidence suggests our citizens' education level has a direct effect on our health and, in fact, could be the foremost factor in our health outcomes. By ranking low in education expenditures in our state we are ensuring Oklahoma will lead the nation in negative health outcomes, reduced human capital and exaggerated and unnecessary healthcare costs.

For the majority of health outcomes, there is a direct correlation related to increased education and increased health. Better-educated (more years of school) individuals have more positive health outcomes. And this association remains substantial and significant, according to the data, even after controlling for job characteristics, income and family background. The one social factor that researchers agree is consistently linked to longer lives in every country where it has been studied is education. It is more important than race; it obliterates any effects of income and health insurance.

Health and health-related effects of education include:

- A positive relation between one's education and one's own health status
- A positive association between schooling and the health status of one's family members (in particular ones own children)
- A positive link between one's own schooling and the schooling received by one's children
- A positive contribution of schooling to the efficiency of (consumer) choices (i.e. on smoking and on the use of health care)
- A relation between schooling and one's own fertility choices and the fertility choices of one's children (in particular negative effect on the probability of giving birth out of wedlock as a teenager)

Not only can an investment in education and increased education experiences for our children have a positive effect, it multiplies -- generating improvements and positive health outcomes for immediate family members and for future generations.

Adding years of education also adds years in life expectancy. According to ground-breaking research by Adriana Lleras-Muney in a prize-winning paper that appeared in the Review of Economic Studies, life expectancy is extended by one and a half years simply by going to school one extra year. A few extra years of school are associated with extra years of life and vastly improved health decades later, in old age. And the effect doesn't diminish with years of school. The education effect never wanes; it only adds to a person's life span and good health.

The findings show: better educated people have lower morbidity rates, life expectancy is increasing for everyone in the United States, yet differences in life expectancy have grown over time between those with and without a college education; and, health behaviors alone cannot account for health status differences between those who are less educated and those who have more years of education.

Why? In most cases experts agree that the relation between education and health arises because a higher education level leads to a healthier lifestyle and because higher educated people are better able to gather, to process, and to interpret information, particularly about health behavior.

Also, education leads to a lower time preference for consumption in the present and a higher time preference for consumption in the future. In other words, the more years of education, the more likely an individual is to plan for future goals and delay gratification. "...through repeated practice at problem solving, schooling helps children to

learn the art of scenario simulation. Thus, educated people should be more productive at reducing the remoteness of future pleasures.”

Not only are health behaviors, overall health, and lifespan improved with education, but the economic numbers work as well.

The total benefits of education are larger than just income and productivity effects. Because of changes in time preferences – delayed gratification – all investments in positive behavior generate benefits for the future.

The average individual return to a year of education – the direct wage effect – is 6 percent to 8 percent (in 2006). The total rate of return is higher than this if you add the value of the education effect on the value of health, according to a study out of the University of Amsterdam.

We know education is associated with most desirable aspects of life; happiness; a stable job, and a satisfying family life. Unemployment rates are generally much higher among lower educated workers than among the higher educated (more years of education).

Education contributes to less criminal behavior and less unhealthy behavior. Education extends life span and reduces negative health outcomes. Yet public expenditures in most western countries and, specifically, our state on health care and law enforcement have increased more than public expenditures on education.

In essence, we are purposefully spending more public funds on remedies for lack of education – unemployment benefits, law enforcement, longer sentencing and health care – than we are on the factor that is most likely to reduce the need for expensive remedies.

Education and health care are the most important characteristics of human capital both having the biggest impact on productivity. And education – more rather than less - has the highest potential to improve our health, outdistancing race, access to insurance, and income as direct effects.

Yet our state continues to follow a policy of less is more when it comes to an investment in education, dramatically reducing the amount, the rate and its share of public support. Our disregard for the evidence and our disregard for the importance of investing in our human capital doom our state and the future of each of our citizens.

Steady declines in appropriations to support common education and higher education, while enrollments have generally increased and mandates and expectations have grown, puts Oklahoma in a precarious human capital and economic disadvantage.

Not only are we undermining our children’s education, workforce preparation and the ability to build our economy, we are ensuring that significant expenses will lie ahead in lower productivity and increased health care costs. The data illustrates the importance of investing in education to ensure a healthier state.

Our state leadership has immediate remedies, including a slowing or elimination in the state income tax rate reduction as well as serious consideration of reducing business tax exemptions/ incentives in the next session.

The healthiest recommendation to propose is to make education our first priority. The result will make everyone healthy and happy! Just envision a healthier, highly educated population and less taxes going to regressive costs!



Section 7
MENTAL HEALTH

Mental Health and Addiction

Terri White, Commissioner, Oklahoma Department of Mental Health and Substance Abuse Services

Behavioral Health in Oklahoma

In March, SAMHSA released a report showing that Oklahoma ranked second nationally for both “serious” mental illness and “any” mental illness among adults.

When prevalence rates for other diseases – such as heart disease or cancer – proliferate in Oklahoma, we see hospitals and private donors working feverishly to build new facilities and research institutes specializing in nothing but these diseases. When mental illness and addiction are involved, the opposite often occurs. When Oklahomans need mental health and addiction services the most, many private hospitals are cutting beds or eliminating behavioral health units entirely; and state funds are simply insufficient to meet ever-increasing needs.

Twenty-two percent of adult Oklahomans reported having a mental health issue in the past year and 12 percent experienced a substance abuse issue (SAMHSA, 2014). That’s 700,000 to 950,000 Oklahomans. Let me say that again: That’s 700,000 to 950,000 Oklahomans! Unfortunately, many of these individuals did not – and may never – receive the care they need to appropriately treat their illness.

Prevention and treatment for mental health and substance abuse issues are among the most pressing concerns, health or otherwise, facing our state today.

Make no mistake. The science is very clear. Mental illness and addiction are diseases...diseases of the brain. Just as with any other illness the disease worsens without appropriate care, which in turn creates negative consequences. We see this frequently with other chronic illnesses such as heart disease and diabetes; however, a difference is that behavioral health issues left untreated have an impact far beyond the individual. There are unintended consequences for families and communities, and outcomes that compromise

government programs and even public safety. Our state consistently ranks among the highest in the region, and nationally, for rates of mental illness and addiction, as well as prescription drug abuse, various measurement rates associated with underage drinking and other related issues such as suicide. All of these negative outcomes are fixable through the use and availability of proven, evidence-based interventions.

Negative Outcomes

The negative outcomes that too often occur as a result of individuals being unable to access treatment are very real. The link between these untreated brain diseases and such things as rising incarceration rates, family fragmentation, poor socioeconomic conditions, a struggling education system and proliferation of other chronic health issues are all well documented.

One point, perhaps better than any other, illustrates the impact of mental health and addiction left under-addressed and untreated. It is a comparison of the average life expectancies for Oklahomans. The numbers are startling.

The average life expectancy for our general population is 75.9 years of age. If mental illness is a factor, that number falls to 57.5 years. Untreated substance abuse is 43.2 years. And, if these illnesses are co-occurring, then life expectancy plummets to 40.6 years. That is a 30 year difference, and it is unacceptable.

This is Not a Problem that Occurred Overnight

A natural reaction by some is to try and pinpoint blame, to look at a particular policy decision or one event that has caused the problem. To do so is unfair and does not give full attention to the depths of what has brought us to the current status quo. Likewise, the challenge of accessible behavioral health care is not unique to our state. It is, however, something for which there is greater need in Oklahoma; and, for which the consequences are arguably more severe.

Unfortunately, state leaders have inherited a problem that is decades in the making; and, the responsibility to find solutions goes beyond just government. It is up to all Oklahomans to make a difference. As a state, we must prioritize behavioral health and support smart targeting of resources.

A 1944 newspaper article in the *Oklahoman* reported that our state's per capita funding for mental health care ranked dead last nationally. Today, we are ranked 46th. That is not a lot of progress over the past 70 years. We can do better. We have not given mental health and substance abuse issues due attention. In the end, this has led to a fractured and fragmented system of care. Publicly-supported and private care behavioral health service delivery systems have not developed in concert with one another. Capacity is not what it needs to be so we may serve all of those in need. There are significant gaps across the treatment spectrum. And, complex challenges must be overcome if we hope to correct many years of inattention.

The answer is that public and private medical and health leaders must come together to create a comprehensive system of care for all persons in need. It means partnership and hard work. We know investments can be made that are capable of creating positive outcomes. These, in turn, can lead to significant cost avoidances in other areas – such as crime and incarceration, long-term treatment needs and acute care, children in state custody and premature death – providing an even greater return on those investments and potentially leading to continued expansion of resources.

Overcoming the Past

The Governor has championed behavioral health issues and legislative leaders have largely been supportive of targeted initiatives to address at-risk populations. Well-placed investment of tax dollars is making a difference for things such as children's treatment services, suicide prevention, offender screening, substance abuse treatment for women who are pregnant or have dependent children, along with drug court and crisis services expansion.

As recently as 2009, Oklahoma was recognized as the most improved state in the nation for mental health care systems and was one of only six states to obtain a rank of B or better in the National Alliance for Mental Illness' "Grading the States" report. That report referenced growing attention to need, and it called for availability of resources to catch-up with our state's capacity for progress. That is our challenge.

The progress made in recent years is part of building a foundation to overcome the past. It will take a continued commitment to this progress and expanded efforts to make a lasting difference. It also means that other areas of Oklahoma's overall behavioral health care system must also prioritize change and share in the improvement process.

What is Needed

Needed in Oklahoma is a comprehensive system of care that involves prevention, early intervention and appropriate treatment.

Brain health is essential to a person's well-being, healthy family and interpersonal relationships, and the ability to live a full and productive life. Unfortunately, many people do not get the treatment they need when they need it. While no one change can fix all problems, there are priority policy decisions that will help lay a foundation to advance behavioral health services and creation of a comprehensive service delivery system. These include:

- **Integrate behavioral health with other medical care** – Primary care and emergency room settings offer an incredible opportunity to identify behavioral illness and intervene. ODMHSAS is partnering with primary care providers to implement the Screening, Brief Intervention and Referral to Treatment (SBIRT) initiative. SBIRT addresses gaps in clinical treatment, and unrecognized substance abuse or misuse that contributes to numerous public health and safety issues. Independent studies have shown a 60 percent decrease in substance use following a single brief intervention.

- **Invest in publicly-supported core services that promote prevention and early intervention** – Offering early intervention and treatment can deter negative and costly outcomes later on.
- **Investment in expanded core services for everyday Oklahomans who are in need of mental health and substance abuse treatment services** – as opposed to just providing services targeted at-risk populations such as those who are in danger of criminal justice engagement – has not occurred over the past decade. Our citizens should not have to be placed in the back of a police car to access care. And, the reality is that the cost to provide these services is far less than the cost to deal with the consequences. Treatment works, as does preventative initiatives including suicide prevention, targeted services to support returning military personnel and continued law enforcement partnership to reduce alcohol sales to minors.
- **Smart on Crime** – Numerous recommendations to address mental illness and addiction within Oklahoma’s criminal justice system – and, more importantly, to divert people in need of medical care into medical facilities and out of the criminal justice system – were developed as part of the Oklahoma Academy’s 2008 Town Hall.

Recommendations from the 2008 Town Hall

The Academy’s 2008 report: “Oklahoma’s Criminal Justice System: Can We Be Just as Tough but Twice as Smart?” recommended full funding of the ODMHSAS “Smart on Crime” proposal. Full funding has not occurred, although targeted investments have been achieved.

- Approximately \$10 million has been invested into specific elements of the proposal including expanded crisis services and offender screening programs. Investments include:
- **First Responder Training** – The department received \$1 million of the original \$5 million

request for expanded behavioral health first responder training.

- **Crisis Centers** – The department received \$7.5 million of the original \$12.5 million request to expand behavioral health crisis services statewide resulting in three new centers (Ardmore, Tulsa and Sapulpa). However, two additional centers are needed to meet the original request and provide relief for associated law enforcement transport issues.
- **Substance Abuse Residential Treatment** – The department received \$2 million of the original \$14 million request to expand residential treatment services and address an everyday waiting list of beyond 600-900 people in immediate need.
- **Jail Screening** – The department received \$1 million of the original \$5.25 million request, which has resulted in services available for 18 counties.

These services have made a difference, but cannot deliver the same outcomes as a fully-funded effort. The state must commit to full-funding of this proposal. It will save lives, and help Oklahoma avoid escalating costs in other areas.

Other department initiatives that are working to support prior Academy recommendations include:

- **Drug Court** – There are 60 adult drug and DUI courts in Oklahoma with approximately 4,000 active participants (as of January 2014). The cost per participant is roughly \$5,000 annually compared to \$19,000 for DOC incarceration, re-arrest rates are less than a third of that for



change in the number of children living with parents. A review of 670 participants from 2007 documented that program participants earned \$23.5 million in total wages over a three year period following their admission to the program. This represents \$1.4 million in total tax revenue expected to be generated. By contrast, if these participants had gone to prison, the estimated cost to tax payers would have been \$38 million.

- **Mental Health Courts** – There are 16 counties that operate mental health courts. Like drug court, this program is highly cost-effective and provides significant cost avoidance opportunities to the state. Oklahoma DOC pays \$23,000 or more per person annually to house mentally ill inmates. Effectiveness of courts can be demonstrated by the reduction in the number of jail days (79% reduction); reduced arrests (92% reduction); reduction in unemployment (81% reduction); and, reduced days spent in an inpatient treatment setting (64% reduction).

The department will continue to advance the “Smart of Crime” proposal’s recommendations, with particular emphasis being placed on completion of requested crisis services and jail screenings for the upcoming legislative session.

Comparison Costs

It is vital to continue these efforts, as future cost savings in other areas, such as public safety, unnecessary ER visits and DHS involvement, are significant. For example, on an annual basis:

- The average cost for an ER visit combined with a community hospital stay is \$5,013.
- For every additional person entering incarceration, the state will pay \$19,000.
- For every child entering the foster care system, the state will pay \$20,965.
- For every additional Oklahoma baby born into addiction, the state will pay \$250,000.

On the other hand:

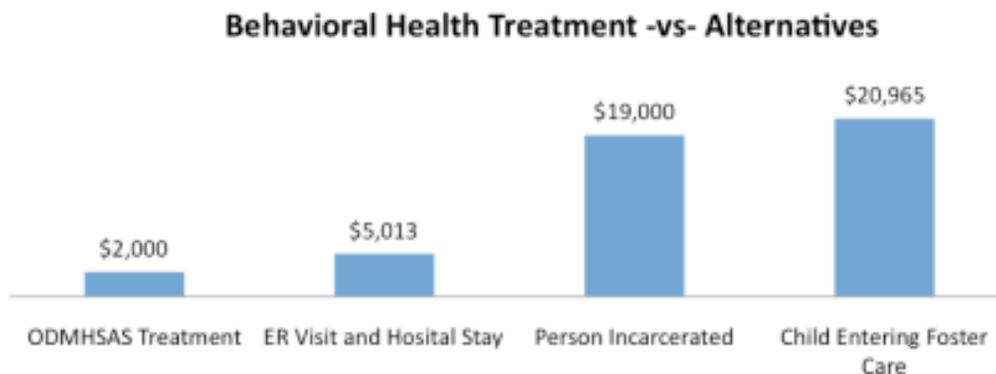
- The cost for one year of ODMHSAS-funded treatment averages only \$2,000 per person.
- The cost for drug court is only \$5,000.

Conclusion

Investing in the mental health of Oklahoma’s people is a responsibility for all health-care providers – the public system cannot do it alone.

Behavioral health disorders affect Oklahomans of all socioeconomic classes. People with “good” insurance have a hard time accessing care, just as do those with publicly funded insurance, such as Medicaid, and people who have no insurance at all. Investment in early intervention services and continued support of the department’s “Smart on Crime” proposal will make a difference.

Together we can increase both efficiency and effectiveness of the statewide behavioral health care system and outcomes that help build a better Oklahoma.



Mental/Physical Health

Teresa Meinders Burkett, RN, BSN, JD, Tulsa

What is the basis for Oklahomans poor health status? The causes we can point to are many: our high smoking rate, our high obesity rate, high poverty rate, low educational attainment, poor access to healthy food choices, narcotic and prescription drug abuse, poor health literacy, high incarceration rate, frequent domestic violence, lack of access to healthcare providers, widespread physical inactivity – take your pick. However, forced to select just one, just one cause that our Town Hall could choose to focus on and turn around, I will point to our high rate of untreated mental health problems as the leading underlying issue that leads to our resulting poor health outcomes.

According to the latest SAMSHA report that is widely available, 2011, Oklahoma ranks near the bottom in all measures of mental health including rates of mental illness, substance abuse, and suicide among adults and adolescents. Knowing from many different studies that there is a high correlation between serious mental illnesses and other poor health conditions, it is a pretty easy line to follow from being number 2 in untreated mental illness according to Oklahoma's Mental Health Commissioner Terri White, and being a state that until only recently had a population that was dying at younger ages every year, a sad anomaly in our country.

Both the Centers for Disease Control and the World Health Organization recognize that the links are strong between mental health conditions and risks of chronic disease including increased cardiovascular disease, asthma, and even cancer risks. The strong link between serious mental illnesses and the resulting functional impairment

that affects an individual's ability to work or care for their family is well documented by both of these organizations. Thus, untreated mental illness merits attention as a primary health issue in our state.

Numerous medical journals report that individuals with serious psychiatric diagnoses, including schizophrenia, bipolar disorder, major depression, and major personality disorders, die at a younger age than those in the population without those disorders. Whether this link is a result of higher rates of smoking and alcohol use, physical inactivity, lack of social interaction, inability to hold jobs, or incarceration or some combination, the premature loss of life for many of these individuals contributes to Oklahoma's lower life expectancies.



After many of Oklahoma's inpatient mental health facilities were closed, there was an expectation that care would be shifted to community mental health facilities, but the funding for these facilities failed to materialize. Many of

the former patients became homeless and then ended up in our corrections system where little to no mental health treatment is provided. Those who remain in the community too often resort to self-medication in the form of smoking and more even more destructive substance abuse. If these individuals had access to medical care appropriate for their conditions, some of the events that flow from these serious diagnoses may be less pronounced or reduced completely.

Commissioner White has repeatedly requested additional funding for mental health and substance abuse treatment in Oklahoma. Instead, with repeated state budget cuts, the funding has decreased at an alarming rate. The slashed

Medicaid budget this year cut 7,000 more people from those waiting in line for mental health care.

Chronic underfunding of this critical state need puts even more people at risk and places greater burdens on our corrections system and our healthcare system. It costs our state in the form of unproductive citizens, too. People with untreated mental health needs often cannot hold jobs, and if they do work, they have higher rates of absenteeism. They are less effective in meeting the needs of their children, placing their children at risk of long-term illness as well, based on the ACEs study offered in these materials by Robert Block, MD. Our state's poor budget choices place us further and further behind, and reduce our citizens' quality of life.

How should we respond? First, we need to immediately accept the expansion of Medicaid offered to our state through the Affordable Care Act. Oklahoma accepts federal dollars for our roads, for schools, for crop insurance, for disaster relief, and for every other malady that comes our way – why not accept the federal dollars our citizens have already paid into the federal treasury to fund the critical health needs of our citizens?

Federal dollars would pay for 100% of the cost of covering new Medicaid recipients through 2016, 95% in 2017, and declining 1% per year until 2020 when the federal portion would be 90% of the costs on a permanent basis. This would return billions of dollars to Oklahoma to create thousands of jobs in healthcare and generate new tax revenue from those new workers, both on their incomes and on the money they would spend. Expanded Medicaid would cover the medical expenses of many in our correctional system currently covered by the law enforcement agencies that have the inmate in custody, thus freeing up money for our prison system to pay for more security personnel and updated facilities, as well as more law enforcement officers in our communities.

Second, we need to integrate mental health training in the curriculum of primary care providers so those who provide the most common and basic health care services can recognize mental health

issues early and treat less complicated problems before they become serious, and refer for higher levels of care those diagnosed with serious mental health issues.

We need to fully implement the prescription drug monitoring program so physicians must determine whether a patient is already receiving narcotic medications from another practitioner before providing another prescription for another narcotic. That is just good medicine and good medicine does not “take too much time”, as some physicians complained the last time this was considered in the legislature. Mental health screenings should become a regular part of primary care services, and should be available through school counselors as well. Early identification of mental health issues would allow for early appropriate treatment before the more significant impacts of undiagnosed and untreated problems are allowed to progress.

Finally, we need to increase the avenues where people can obtain treatment for mental health and substance abuse needs so problems are detected and treated early. We are a largely rural state, but there are few mental health practitioners in our rural communities. Telemedicine and counseling sessions by telephone and Skype may be a means to extend the reach of our mental health services to more of our citizens.

We need to properly fund mental health providers so the long promised community mental health centers can finally open and provide the services so many people require. We need to train our early childhood educators to identify emotional and behavioral disorders in children so early referrals for treatment can be made and children can enter school healthy and ready to learn.

Oklahoma has a long way to go in addressing our mental health and substance abuse needs, but if we want to find a place to make a big impact in Oklahomans' physical health status quickly, this is an area with a lot of promise that can yield significant positive results. But it will take money, and it will take a willingness to step beyond political ideologies and do what is right for the Oklahoma people.

Going All Out To Defeat Mental Illness

Richard Wansley, PhD, Oklahoma State University Center for Health Sciences

Mental illness ranks among the most prevalent of the diseases worldwide. The World Health Organization states that “psychiatric disorders are among the top 10 of all diseases around the world that lead to disability and economic losses...impacting individuals, their families, and the entire community.” In the US an estimated 20% of adults aged 18 and older suffer with any mental illness in a given year. Untreated and mistreated mental illness costs American business, government, and taxpayers an estimated \$113 billion each year.

In Oklahoma, the evidence shows that an even greater number of people, roughly 25% or 1 in 4 adults, have a mental illness. Serious Mental Illness (Major Depressive Disorder, Bipolar Disorder, Schizophrenia, and the like) suffered by US residents accounts for about 6% of the population, again even more in our own state.

Regretfully, mental illness is generally considered by the public to be a disease separate and apart from other chronic medical disorders, often perceived as some mysterious affliction not entirely based on physical causes. In fact, the National Institutes of Health clearly defines mental illness as solely a brain disease that is a dysfunction of biological function, typically a chemical imbalance of the nervous system, and no less physically based than other brain diseases such as Parkinson’s, multiple sclerosis, and epilepsy. However, in spite of the evidence, many Americans still view mental illness

as a “character flaw”, and are unwilling to associate with someone who suffers from a mental illness even though it is likely many are our colleagues, friends, and family members. The USA Today survey (June 26, 2014), below illustrates these public opinions.

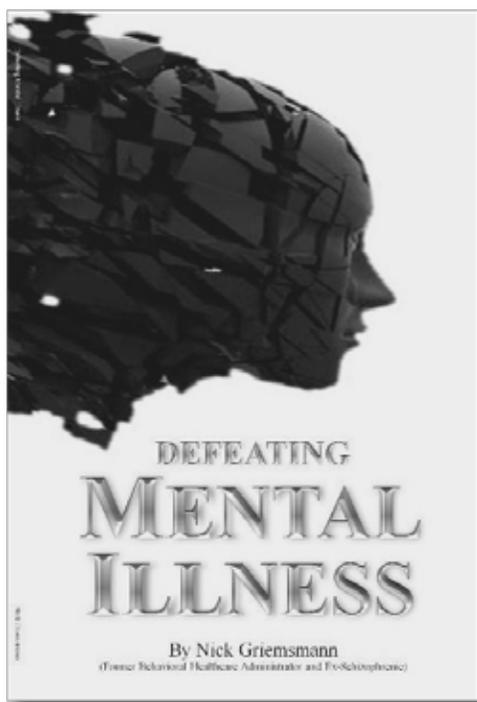
The survey also points out the perpetual myth believed by the public and exaggerated in the

media in recent times of a link between mental illness and violence. But, in truth, people have little reason for such fears.

The Institute of Medicine (2006) reports, “Although studies suggest a link between mental illnesses and violence, the contribution of people with mental illnesses to overall rates of violence is small, and further, the magnitude of the relationship is greatly exaggerated in the minds of the general population.”

Substantial research demonstrates that violence is more related to substance abuse regardless of whether the perpetrator suffers from a mental illness or not. In fact, another study found people with a mental illness are far more likely to be the victims of violence.

Lastly, it is important to note that people who suffer untreated mental illness have greater risks for other chronic diseases. For example, people with schizophrenia or bipolar disorders have increased risk for cardiovascular disease due to modifiable factors such as obesity, smoking, diabetes, hypertension, and high cholesterol.

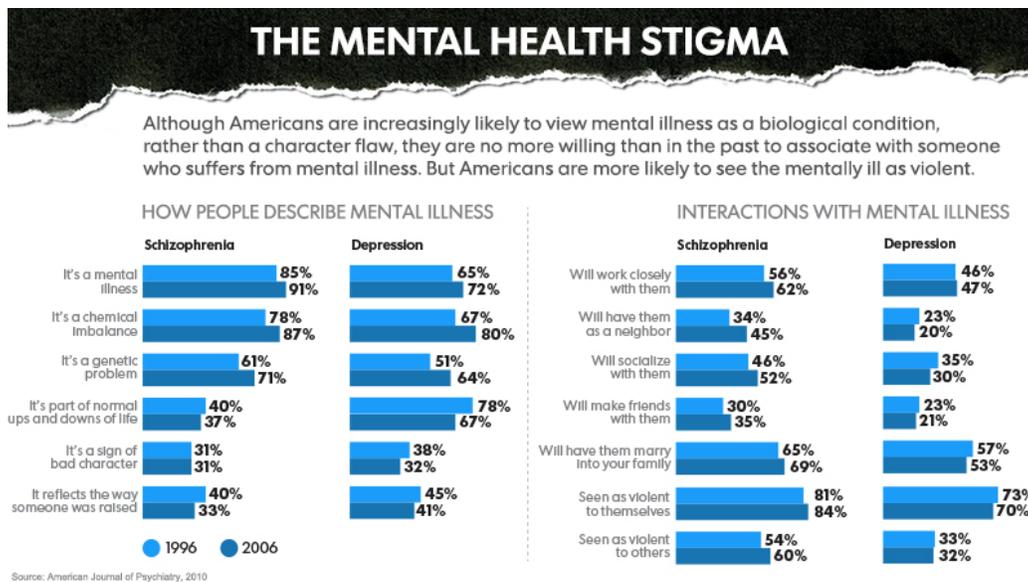


An analysis by Aetna Health Insurance found that insured patients with depression who also suffer one of a wide variety of co-occurring medical complaints such as allergy, asthma, back pain, diabetes, and ischemic heart disease have from 2 to 3 times the annual medical costs compared with those who don't suffer a mental illness.

The Oklahoma Department of Mental Health and Substance Abuse Services' Commissioner Terri White has been an energetic advocate challenging and changing public opinion about mental illness, seeking to reduce the stigma surrounding this brain disease as well as pointing out how greater access to prevention and treatment services benefits us all.

For no other medical disorder with such immense personal and economic cost would we stand for anything less than an "ALL OUT" effort by Oklahoma's elected government officials to provide the financial support needed to confront and conquer this disease.

The Oklahoma Academy should endorse whatever funding is necessary for the Department to fully implement its well-conceived plans for prevention and treatment services, an adequate well-trained mental health workforce, and cost-saving alternatives to incarceration.



Oklahoma Mental Health

Mary Ellen Jones, Board Member, National Alliance on Mental Illness

This essay was printed in the Oklahoma Gazette, February 27, 2013, and reprinted here with permission of the author.

In her State of the State address, Gov. Mary Fallin is to be commended for the inclusion of mental health when talking about health and for proposing increased funding for mental health programs. Mental illness is a medical condition of the brain, an organ of the body, and should be treated like any other organ related malady.

A report on mental health care by the National Alliance on Mental Illness, or NAMI, gave the state a grade of B, citing innovations such as mental health and drug courts, collaboration with the state Departments of Corrections and Health and peer recovery support specialist certification. Oklahoma is making progress.

Much more needs to be done, however, to make appropriate services available to all who need them.

The NAMI report card highlights the following needs:

- reduce the high rate of incarceration of people with mental illnesses;
- address the shortage of inpatient beds;
- increase supportive housing;
- address Medicaid's restrictive medication policies that utilize a tiered approach for psychiatric medications;
- provide culturally competent services to Oklahoma's diverse population;
- expand PACT (Program of Assertive Community Treatment) and other evidence-based practices; and invest in the state's comprehensive plan for substance abuse and mental health service.

For adults with severe psychiatric illnesses, two of Oklahoma's greatest needs are crisis and inpatient treatment.

According to the Treatment Advocacy Center, experts estimate a need for at least 50 public psychiatric beds per 100,000 population. That assumes the availability of good outpatient programs and outpatient involuntary commitment, which prevent the need for hospitalization.

In 2010, Oklahoma had 11 beds per 100,000 — 23 percent of target beds per capita. Today, it isn't uncommon to have no available beds for a person in crisis or in need of inpatient treatment. The consequences of the bed shortage could be improved with the widespread utilization of PACT programs and involuntary outpatient treatment. Oklahoma's PACT program needs to be expanded statewide. Likewise, both inpatient and outpatient involuntary commitment to treatment need to be appropriately and consistently implemented.

Civil liberties must be protected, but the pendulum has swung too far in restricting access to care for individuals who are incapable of seeking help voluntarily. Involuntary treatment is compassionate care for persons whose ill brains do not recognize that they are ill.

Increased public education about mental illnesses and treatment services is also essential. Too often, ill individuals and their families do not recognize the symptoms and do not seek help until a crisis occurs. The state could do more to promote public awareness of mental illnesses and services.

The NAMI report card concludes: "If Oklahoma can successfully implement its state plan, it could become a national leader in comprehensive, recovery-oriented mental health care. But, the state has one of the lowest per capita rates of mental health funding in the nation ... the Legislature needs to give high priority to mental health care reform."



In 2006, the state's mental health care system received a D grade. Three years later, the grade is a B, reflecting remarkable improvement and significant opportunities.

The Oklahoma Department of Mental Health and Substance Abuse Services (ODMHSAS), an independent agency, created an inclusive, collaborative process, effectively using planning funds. ODMHSAS convened consumers and family members, providers, and other human service organizations in six working groups to assess mental health needs. The process resulted in the "Oklahoma Comprehensive Plan for Substance and Mental Health Services," which is intended to guide the implementation of state-of-the-art, evidence-based, wellness-oriented services. The success of this initiative led to acknowledgment from the larger human services community that mental health is a critical component of overall health.

Over the past several years, Oklahoma has implemented several best practices, including jail diversion and reentry programs, Medicaid-funded peer specialists, and dual diagnosis mental health and substance abuse services at all 13 of the state's community mental health centers (CMHCs). Oklahoma is also known for its statistics division and innovative use of data. For example, the state uses data to provide an enhanced payment to CMHCs that include wellness activities, such as nutrition classes and smoking cessation, as an integral part of care.

ODMHSAS is partnering with the Oklahoma Health Care Authority (OHCA), the state's Medicaid agency, on an innovative project called "SoonerPsych" that tracks physician prescribing practices and notifies doctors if their prescribing pattern falls outside accepted guidelines. This voluntary program is beneficial not only to psychiatrists, but also general practitioners who prescribe psychiatric medications.

The state has very high rates of incarceration. Inmates include many people with mental illnesses. Together, ODMHSAS and the Oklahoma Department of Corrections are working to change this, but progress is hampered by lack of funding for community mental health services.

There is one state hospital, and with scarce funds it is difficult to build up community services to lessen dependence on inpatient care. The lack of a statewide, full range of community evidence-based practices increases the need for inpatient care, resulting in a shortage of inpatient beds—a vicious cycle that ultimately costs the state money.

In 2008, ODMHSAS reported 202 people served by the agency's rental subsidies and other housing support services. More supportive housing is necessary if comprehensive community services are to become a reality.

Issues exist with Medicaid's restrictive medication policies. The OCHA uses a tiered approach for psychiatric

Innovations

- Mental health and drug courts
- Collaborations with Department of Corrections and Department of Health
- Peer recovery support specialist certification
- Inclusive transformation grant process

Urgent Needs

- Invest in comprehensive plan
- Expand ACT and other evidence-based practices
- Expand cultural competence activities
- Supportive housing

Consumer and Family Comments

- "Medications are constantly changing and when I find some that work, the doctor says the Medicaid agency has to approve it and it doesn't approve it."
- "Funding is always an issue, but advances such as ACT teams and mental health court and drug courts, which have been proved to be effective, are in jeopardy because of cutbacks in funding."
- "Link between the hospital system and the outpatient community system is uncoordinated. It can take too long to get outpatient care after the hospitalization is complete."
- "People with mental health problems are quite often placed in jails and prisons instead of mental health facilities and held indefinitely, because the mental health facilities are so inadequate that they don't have room for the new person."

medications, with co-pays and prescription limitations. Although appeal processes exist, these can hinder access to appropriate, effective care and result in psychiatric crises.

The state is beginning to pay attention to cultural competence needs. In December 2008, ODMHSAS sponsored a statewide training of trainers by the National Multicultural Institute, but more is needed if it is to provide culturally competent services to its diverse population.

If Oklahoma can successfully implement its state plan, it could become a national leader in comprehensive, recovery-oriented mental health care. But, the state has one of the lowest per capita rates of mental health funding in the nation.

ODMHSAS' dynamic leadership and considerable goodwill in the mental health community can help build the political support necessary for sustained investment in the plan's vision. However, broader leadership is needed. In particular, the legislature needs to give high priority to mental health care reform. To succeed, this state must transform potential into practice.

Myths of Smoking Pot

Ruth Markus, Washington Post, June 24, 2014

From her perch as head of the National Institute on Drug Abuse in Bethesda, Nora Volkow watches anxiously as the country embarks on what she sees as a risky social experiment in legalizing marijuana.

For those who argue that marijuana is no more dangerous than tobacco and alcohol, Volkow has two main answers: We don't entirely know, and, simultaneously, that is precisely the point .

"Look at the evidence," Volkow said in an interview on the National Institutes of Health campus, pointing to the harms already inflicted by tobacco and alcohol. "It's not subtle — it's huge. Legal drugs are the main problem that we have in our country as it relates to morbidity and mortality.

By far. Many more people die of tobacco than all of the drugs together. Many more people die of alcohol than all of the illicit drugs together.

"And it's not because they are more dangerous or addictive. Not at all — they are less dangerous. It's

because they are legal ... The legalization process generates a much greater exposure of people and hence of negative consequences that will emerge.

And that's why I always say, 'Can we as a country afford to have a third legal drug? Can we?' We know the costs already on health care, we know the costs on accidents, on lost productivity. I let the numbers speak for themselves."

Volkow speaks rapidly, even urgently, in an accent that lingers from her childhood in Mexico. The great-granddaughter of Soviet communist Leon Trotsky, Volkow grew up in the Mexico City home where Trotsky was fatally attacked.

It is easy to imagine, in her passionate determination, some of her ancestor's revolutionary fervor, melded with a scientist's evidentiary rigor.

Ruth Marcus is a columnist and editorial writer for The Post, specializing in American politics and domestic policy.



Section 8

TRIBAL HEALTH

Tribal Health Care in the 21st Century

Charles Grim, DDS, Cherokee Nation, Bill Lance, Chickasaw Nation and team as below.

This article was coordinated and organized by Captain David Gahn, MD, MPH, FACOG. Dr. Gahn is a board certified Ob/Gyn physician at Cherokee Nation Hastings Hospital and Surveillance Coordinator for Cherokee Nation Public Health.

Production team members include: Lieutenant Commander Julie Erb-Alvarez, MPH, Area Epidemiologist for the Indian Health Service (IHS) Oklahoma City Area (OCA); Melissa Gower is a Health Policy Analyst for the Oklahoma City Area Intertribal Health Board; Terrence K. Kominsky, Ph.D. the Coordinator for Behavioral Health Research & Evaluation for Cherokee Nation Behavioral Health; Elizabeth Montgomery-Anderson, GISP is a GIS Analyst for Cherokee Nation GeoData; and Michael Peercy, MPH, epidemiologist with the Division of Research and Population Health, Chickasaw Nation.

The principal tribal sponsors of this analysis are Charles Grim, DDS, Deputy Director for Health Services for the Cherokee Nation and Bill Lance, Secretary of Commerce for the Chickasaw Nation and former Chickasaw Nation Health System Administrator.

INTRODUCTION

Health care for American Indian/Alaska Natives (AI/AN) often comes from a system that is separate from that of mainstream America. The Indian Health Service (IHS) is currently the federal agency with primary responsibility for fulfilling the United States' trust obligation to provide health care for AI/AN people. The IHS and tribes have developed a system of hospitals, clinics, field stations, and other programs in the attempt to fulfill the federal trust responsibility and meet the health care needs of AI/AN people.

The roots of all of this activity lie in the federal trust responsibility. From the beginning, tribal sovereignty, government-to-government relations

between tribes and the US, and tribal autonomy have existed as common themes underlying federal-Indian relations. Consequently, a unique federal trust responsibility has grown as a result of the relations between the federal government and tribes.

In exchange for the vast amounts of land that treaties transferred from tribes to the federal government, the government promised to provide, among other things, health care to Indians. Federal law recognizes that the original treaty stipulations on health care serve as a basis for a federal obligation to provide for Indian health care.

OUR HISTORY

During the 1800s, the US Army took steps to curb infectious diseases among tribes living in the vicinity of military posts, in order to protect its soldiers and neighboring non-Indians. This was the first provision of health services to American Indians by the federal government. The first Congressional appropriation specifically for Indian health care was in 1832, which authorized the purchase and administration of smallpox vaccine.

The War Department was initially in charge of Indian affairs. Indian health care passed from the military and missionaries to civilian control in 1849, when the Bureau of Indian Affairs (BIA) was transferred from the War Department to the newly formed Department of the Interior (DOI). At this



Vinita Health Center, Cherokee Nation

time, Native Americans were being placed on reservations which meant increasing risk to disease due to poor living conditions. By 1880, only 77 physicians were serving the entire American Indian population in the United States and its territories. The move to reservations had harmful health effects, in part because it often created a shift away from traditional diets. It became increasingly difficult or impossible to hunt and gather traditional foods and medicines. Many of the health problems faced by AI/AN people today, such as diabetes, cancer, and heart disease, are related to shifts from traditional dietary patterns to a diet heavy in fats and carbohydrates.

Eventually, actions were taken to improve AI/AN health services. Congress passed the Snyder Act in 1921, which provided explicit legislative authorization for federal health programs for members of all federally recognized tribes. The Snyder Act mandated the expenditure of funds for “the relief of distress and conservation of health ... [and] for the employment of ... physicians ... for Indian tribes.” This provided the first formal authority for federal provision of health care services to all federally recognized tribes.

BIA health care services received another boost in 1926 when physicians from the Commissioned Corps of the US Public Health Service (PHS) were first assigned to Indian health programs. In 1955 Congress transferred total responsibility for Indian health from the DOI to the PHS, which was under the Department of Health, Education and Welfare later renamed the Department of Health and Human Services. The legislation stated that

“all facilities transferred shall be available to meet the health needs of the Indians and that such health needs shall be given priority over that of the non-Indian population.”

Along with civil rights movements and the American Indian Movement of the 1960s and 1970s came a shift towards self-determination for American Indian tribes. In the early to mid-1970s, Congress passed several laws designed to strengthen and restore tribal sovereignty: the Indian Self-Determination and Education Assistance Act of 1975 (P.L. 93-638) and the Indian Health Care Improvement Act of 1976 (P.L. 93-437).

SELF DETERMINATION

The “Self-Determination Act” directs the Secretary of the DOI and the Secretary of the Department of Health and Human Services (DHHS), upon the request of any Indian tribe, to enter into self-determination contracts or compacts with tribal organizations. Congress made self-governance a permanent program in 2000.

The Indian Health Care Improvement Act (IHCIA) addressed the persistent lag of Indian health behind that of the general population, and it set forth a national goal to provide “the highest possible health status to Indians and to provide existing Indian health services with all resources necessary to effect that policy.”

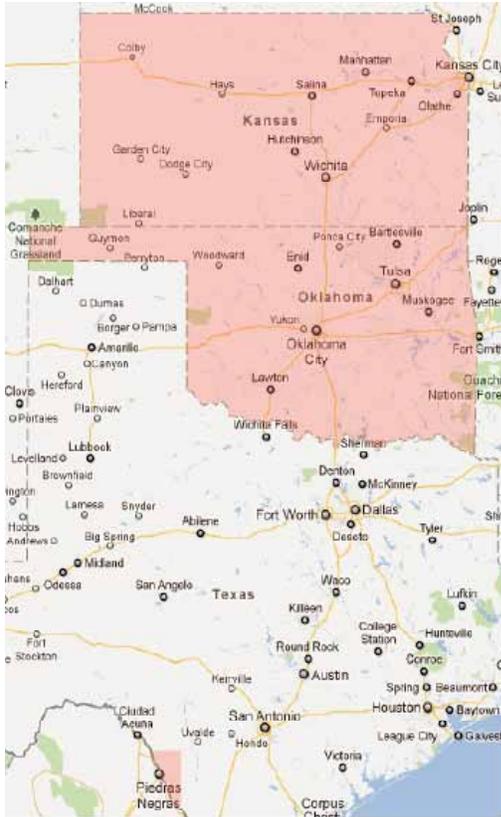
Today, acting under the broad authorization of the 1921 Snyder Act and the IHCIA, the Congress appropriates funds to the IHS to meet the federal government’s trust responsibility to provide health

care services to AI/AN people. Few would argue that the funds appropriated adequately meet that responsibility, particularly in light of the clear health status disparities between AI/AN people and other population groups.

Tribal Governments have three health service options.



Tishomingo Health Center, Chickasaw Nation



Tribes may have health services provided by the Federal Government, primarily through the IHS. Second, tribes have the option to contract with IHS for those programs or services they wish to provide for their members. Third, tribes can assume, through compacts, the total operation and control over their health systems from IHS; these are referred to as Self-Governance Tribes.

Today, approximately 38% of the Indian Health Service budget is going directly to Self-Governance Tribes, representing 340 of the 560 federally recognized Tribes, to fund services and programs. Approximately \$1.5 billion or nearly 38% of IHS budget is administered by Tribes through self-governance.

The Indian Health Service in Oklahoma

The IHS Oklahoma City Area serves the states of Oklahoma, Kansas, a portion of Texas and Richardson County, Nebraska. Forty-three tribes are represented within the Area with 38 in Oklahoma, 4 in Kansas, and 1 in Texas. In FY 2013, the Area user population was 345,680 or

21.9% of the total IHS users which makes the Oklahoma City Area the largest Area in Indian Health Service. The Indian health systems within the Area manage 7 hospitals, 53 health centers or health stations, and 1 regional treatment center. The large number of tribal health care facilities and programs is a strong reflection of the partnership and cooperation within the Oklahoma City Area to fulfill the existing health care needs of our community. Additionally, 2 urban clinics operate independently in Oklahoma City and Tulsa.

The historic allocations of resources appropriated to the Indian Health Service by line items are distributed by the Agency using various methodologies. The Oklahoma City Area has been historically in the bottom 25% and one of three Areas receiving the lowest for Hospitals and Clinics, Mental Health, Alcohol/Substance Abuse and Contract Health Services.

Delivery of care is substantially complicated when the direct services system is funded at the third lowest level overall and at the lowest level for services needed outside the health care system (Purchased and Referred Care (PRC), formerly known as Contract Health Services). IHS is funded at just over 50% of identified need making it difficult to provide an appropriate level of service in its direct care program. Consequently, the Purchased and Referred Care program is relied upon to provide specialty services unavailable in the hospitals and clinics. While PRC is also underfunded, it has received substantial increases in recent years which have benefitted all IHS patients.

In the OKC Area, approximately 65% of the hospital and clinic budget, 72% of dental budget, and 70% of the preventative health programs are going directly to Self-Governance Tribes.

Demographics

American Indians make a substantial contribution to the culture, health, and economic prosperity of Oklahoma. However, American Indians in Oklahoma lag the general population in many important socio-economic metrics which are the most powerful predictors of health.

The 2010 US Census indicates there are 482,760 American Indians in Oklahoma accounting for 12.9% of the population. The median household income for American Indians in Oklahoma is \$35,804 compared to \$45,377 for whites. The unemployment rate for American Indians was 6.9% compared to 4.1% for whites. Far more American Indian families live in poverty, 17.5%, as opposed to 10.8% of white families, and 28% of American Indian children in Oklahoma live in poverty.

According to 2010 US Census data, 17.5 percent of American Indian families in Oklahoma live in poverty.

Health Behaviors

We often focus on health behaviors because we recognize the opportunities to assist and encourage healthier living.

Oklahoma State Department of Health (OSDH) routinely performs the Behavioral Risk Factor Surveillance Survey (BRFSS) which gives us some insight into the American Indian population and the potential sources for disparate health outcomes. The three most important health behaviors in overall health are tobacco use, physical activity, and nutrition.

Smoking

Smoking is well known to be the leading cause of preventable death and disability in the United States. According to the recent report prepared by the University of Oklahoma Health Sciences Center College of Public Health, 2011 BRFSS data indicate that 34.1% of American Indians in Oklahoma currently smoke cigarettes as compared to 25.7% of whites and 25.1% overall. While American Indians in Oklahoma wish to quit smoking and attempt as often as their white counterparts, disparities in cigarette use persist.

American Indians are more likely than whites to allow smoking in their homes (28.4% v. 24.0%) and to allow smoking in their cars (33% v. 22.4%).

Additionally, American Indians suffer higher mortality rates from lung cancer, heart disease, and chronic lower respiratory disease than other groups in Oklahoma.

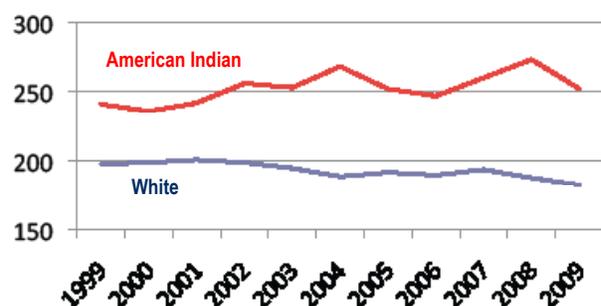
Obesity

Obesity is a serious concern throughout Oklahoma. The 2012 BRFSS survey indicates that 37.5% of American Indian adults in Oklahoma are obese compared with 31.0% of whites. 70.6% of American Indians rarely eat vegetables versus 74.7% of whites, and 28% of American Indians and whites do not engage in any leisure time physical activity.

Youth Issues

Like BRFSS, the Youth Risk Behavior Survey (YRBS) helps health departments monitor and track risky behaviors in high school students. The survey completed in 2013 showed that, compared to whites, more American Indian high school children smoked every day for the previous 30 days (6.5% v. 3.0%), and more drove while drinking (11.4% v. 8.1%). Fewer American Indian high school children did not wear a seat belt compared to their white counterparts (6.3% v. 8.3%), fewer reported being bullied at school (17% v. 20%), and 20% ate the recommended amount of fruits and vegetables a day versus 12% of white children. Overall, American Indian students' behaviors can be difficult to survey because of the small numbers usually included in the surveys. Under-sampling leads to large margins of error that make progress difficult to monitor.

Age-Adjusted Death Rates per 100,000 People from Cancer in Oklahoma 1999-2009



Poor health behaviors are learned from an early age. Public health programs for children focus on the school environment, as it presents consistent opportunities to encourage physical activity, healthy eating, and tobacco avoidance. Public health programs must continue to promote healthy communities that allow for children and their families to make healthy choices.

These programs include safe and tobacco-free parks, a consistent, pervasive anti-tobacco message, joint use agreements with schools and community centers, and improvements to the built environment (sidewalks, bike lanes, etc.). Additionally, they promote the availability of local, fresh foods, the discovery and abolition of food deserts, and access to effective clinical services to prevent and treat childhood obesity.

Cancer

Cancer mortality is a huge burden for Oklahoma's American Indian communities. Nationally, cancer has become the leading cause of premature death in the American Indian populations (White, Espy, 2014) although in Oklahoma cancer is second behind heart disease. In the last two decades a great deal of progress has been made regarding cancer awareness and prevention, but disparities in cancer mortality remain. Lower socioeconomic status and health care access issues lead to decreased specialty care and late-stage cancer diagnoses (White, Espy, 2014).

Maternal Child Health

Despite many improvements in pregnancy care for Oklahoma's American Indian women, disparities remain. American Indians continue to have a higher percentage of mothers who receive no prenatal care when compared to all races (2.39% vs. 1.98%). Use of alcohol and tobacco products during pregnancy is also more prevalent in the AI/AN population. Teen pregnancy rates are falling for all races in Oklahoma, but the American Indian rate continues to be higher than the Oklahoma all-races rate (5.1 vs. 4.2 per 1,000). Also, the rate of high birth weight babies is higher for the American Indians (9.6% vs. 7.7%).

Behavioral Health

One of the most deleterious health issues facing American Indians is behavioral/mental health care. Untreated or poorly treated behavioral care issues can interact and worsen exponentially as a person ages thereby increasing the harm to the individual, their family, and their communities as a whole.

American Indian children in Oklahoma face a number of challenges to their optimal development. Only 36% of American Indian children live at or above 200% of the national poverty rate, compared to the national average of 55% (Annie E. Casey Foundation, 2014).

Poverty is a risk factor for many problems, including child maltreatment and other adverse childhood events (ACEs; Burchinal & Willoughby, 2013). American Indian children are overrepresented in the child welfare system (Children's Bureau, 2010) and if it is assumed that American Indian children are involved with child welfare on account of child maltreatment (as opposed to other factors), it can be reasoned that they are also disproportionately traumatized.

Childhood trauma has long-term consequences. In a study of 1,209 adult participants, childhood trauma was "associated with an increased risk of psychopathology, in particular, the emergence of depressive and anxiety disorders in adults" (Hovens et al., 2012). Childhood trauma is also linked to increased cardiovascular disease as evidenced by stress influenced lipid levels in adults (Spann et al., 2014).

American Indians have an average life expectancy of 5.2 years less than the general US population (Devi, 2011). American Indians are impacted by historical trauma, which is "a complex and collective trauma experienced over time and across generations by a group of people who share an identity, affiliation, or circumstance" (Brave Heart and DeBruyn, 1998). Historical Trauma has been linked to health disparities, including disparities in physical and mental health (Mohatt, Thompson, Thai, & Tebes, 2014). It is likely that these various health issues are related to historical trauma and

other traumas experienced by American Indian children.

From 2005 to 2009, the suicide rate among American Indian youth was the highest in the US (CDC). In fact, suicide is the second leading cause of death among American Indian youth. One of the largest impediments to providing exceptional and timely services is that the data surrounding youth suicide is often painfully inadequate. Suicide rates among American Indian youth are severely under-reported. Suicides among local youth are often reported by law enforcement as accidental in an effort to maintain the privacy of the family and to avoid any stigma.

Sexual assault and domestic violence rates among American Indians are also higher than the national average. American Indian women are 2.5 times more likely to be the victim of sexual assault than any other race, and one in three American Indian women will be raped in her lifetime. Some survey results have indicated that as many as 39% of American Indian women may have experienced intimate partner violence (CDC, 2008). In one study, 96% of American Indian women in a substance abuse treatment program reported being the victim of rape or sexual assault (Saylor & Daliparthi, 2006).

The prevalence of substance abuse among American Indians is a behavioral health problem that continues to blight Native populations. The rates of binge drinking and illicit drug use are higher among American Indians than the national average. Given the severity and broad range of the issues, and taking into account barriers discussed above, it may be that American Indians are turning to substance use as a means to self-medicate.

American Indians face many disadvantages to optimal development. Historical and childhood trauma may impact their physical health and brain development. High rates of childhood poverty intensify the risk factors that lead to poor psychological, social, and emotional development thus leading to an increased dependence on behavioral health services as these children grow.

Barriers to high-quality, evidence-based treatments include underfunded tribal behavioral health departments, distance from behavioral health services, hours offered for behavioral health services, and other practices. Specifically identified needs include outpatient case managers to track patients through various systems and agencies, increased availability of inpatient and residential treatment facilities, and state-wide collaboration among federal, state, and local behavioral health service providers to better coordinate efforts to meet these challenges.

HEALTH INITIATIVES

Government Performance and Results Act (GPRA) The Government Performance and Results Act of 1993 (and Modernization Act of 2010) requires that any federal agency report performance measures to demonstrate the effective use of federal funding. The IHS/Tribal/Urban (I/T/U) sites in Oklahoma provide these reports to the Area Office where they are compiled into an Area-wide report to IHS. The I/T/U GPRA measures are clinical in nature and relate directly to the care of the population.

The measures center on standards of care for management of specific diseases, and for behavioral and preventive health. These required reports also provide the facilities with accurate assessments of the performance of the health systems and demonstrate the effects of quality improvement initiatives. GPRA measures and reports are available at http://www.ihs.gov/crs/index.cfm?module=crs_gptra_reporting.

Special Diabetes Program for Indians (SDPI)

In 1997, Congress funded the special diabetes program for Indians to help curb the growing epidemic of diabetes in the American Indian population. The federal government set aside \$150 million as grants to individual I/T/Us to support treatment and prevention activities. Since the first funds were awarded, significant progress has been made in the fight against diabetes.

Access to diabetes treatment and prevention services has increased exponentially. Specific



diabetes measurement such as HgbA1C and LDL cholesterol show that many diagnosed diabetics have better control of their disease. One of the major achievements of this program was the dramatic decrease in the incidence of end-stage renal disease resulting in fewer patients requiring hemodialysis treatment. These achievements result in fewer diabetic patients, better outcomes for diabetic patients and considerable cost savings for Medicare, Medicaid and other third party payers. This very successful program enabled I/T/Us to attack diabetes directly through targeted care specific to prevention and treatment of diabetes. Additional information on SDPI is available at <http://www.ihs.gov/MedicalPrograms/Diabetes/?module=programsSDPI>.

Improving Patient Care (IPC)

Since 2007 with the beginning of the Improving Patient Care (IPC) initiative, IHS has been focused on implementing the Indian Health Medical Home (IHMH) concept, based on the Chronic Care Model of care. With the success of this program, tribal and urban sites have also implemented IPC models within their clinics. The IHMH concept provides care in a patient-centered medical home model.

This model of care allows patients to receive care in an environment in which there is a relationship between the patient, the provider, and the care team. This in turn, empowers the care team to provide services that meet or exceed the highest quality standards of care, and helps patients achieve their health goals. By creating the medical home, it allows the care teams to provide care that honors and respects the tribal cultures and practices of their patients.

In the past, many patients using I/T/U facilities seldom saw the same medical provider during consecutive appointments. There was a high-turnover rate for providers, and each patient

was not necessarily assigned to any particular care giver. With IPC, and other changes to health systems, the medical home model helps to ensure that patients see the same provider or care team for their visits. In turn, this initiative results in reductions in appointment demand, hospitalizations, referrals, ancillary service utilization (lab and pharmacy), and no-show rates. (www.ihl.org)

The Oklahoma City Area IHS has taken the national IPC initiative a step further and implemented a program called IPC Made Simple (IPCMS).

Driven by the Area's Improvement Support Team, this initiative teaches Indian Health Medical Home concepts and best practices locally to care team staff and guides them through implementation of the IHMH model. IPCMS has cut down the time and data reporting requirements of IPC and has allowed significantly more facilities in the OCA to implement IPC best practices, resulting in improved health outcomes to more patients. Additional information on IPC is available at <http://www.ihs.gov/ipc/>.

TRIBAL PUBLIC HEALTH

It is well understood that improving the health status of American Indians in Oklahoma requires investing in prevention through environmental change and policy improvement. This is most effectively done through the ten essential services of public health. Public health functions performed directly by tribal governments present remarkable advantages to the community at large. The tribal environment provides for strong community connections and leadership in the allocation of limited resources to meet the health needs. When these needs are identified by the communities, supported through the tribal government, and implemented in partnerships, the outcomes are enhanced and sustainable.

The tribal health systems also provide an excellent example of the integration of public health and clinical care. In many tribal organizations, the two arms of health services work in close collaboration

to provide targeted health programs to address community issues and implement complementary services in the clinical arena.

Building the infrastructure within a tribe to provide the ten essential services of public health requires talent, vision, leadership, time, and funding. Within Oklahoma exists a significant talent pool of American Indians with the training and experience necessary to lead a tribe through the process of developing a public health system.

Currently, most infrastructure support for tribal public health is provided through federal grants either directly to tribes or through federal funding to the state. This makes our public health departments subject to the federal budgetary process and makes long term planning difficult.

Successes in tribal public health in Oklahoma can be greatly attributed to productive partnerships throughout the state. The several tribal liaisons throughout the Oklahoma state government provide essential links and develop relationships to assist tribes in public health program development and implementation. Furthermore, the Oklahoma Area Inter-tribal Health Board's Tribal Epidemiology Center provides a central link to tribal public health.

Relationships with the federal government also are essential. IHS provides access to a coordinated approach to providing health services to tribes and coordinates public health data at the state and national levels. The Centers for Disease Control and Prevention (CDC) leadership has also made a firm commitment to tribal governments, and through a functional advisory committee responds to the public health needs of tribes.

As tribes develop public health programs, tribal-specific population data is of most importance. OSDH through coordination with IHS provides excellent vital statistics data by correcting racial misclassification errors that are common on death certificates. The various community surveys mentioned earlier (BRFSS, YRBS, ATS, YTS, OPNA) need to be expanded to provide tribe-

specific data to tribal public health departments. With technical assistance from state and federal partners, and amongst tribes, these data can be turned into useful information leading to targeted public health programs where the need is greatest.

Many tribal systems within the Oklahoma Area have created close partnerships with academic health centers to help address gaps in research and funding. Working in collaboration with academic researchers, tribes can better compete for research grant funding from agencies such as the National Institutes of Health (NIH), the Agency for Healthcare Research and Quality (AHRQ), and the Health Resources and Services Administration (HRSA).

The tribes are actively working to create internal research infrastructure to better address the public health questions that are important to the people of the tribe. Federal programs such as Native American Research Centers for Health (NARCH) through NIH have laid the groundwork for the research infrastructure in many tribes.

CURRENT LEGISLATION/POLICY

Currently, there are a few major legislative/policy initiatives that would progress the Indian Health Care system:

S. 1570 and H.R. 3229 Indian Health Service Advance Appropriations Act of 2013: This bill was introduced in the Senate in October, 2013 and referred to the Committee on Indian Affairs, who held a hearing on April 2, 2014 and passed on to full Senate.

On February 3, the House Budget Staff expressed non-opposition to Advanced Appropriations and advised to collect House Appropriations committee members as co-sponsors. This legislation would allow for the Indian Health Service (IHS) to receive advance appropriations. An advance appropriation is funding that becomes available one year or more after the year of the appropriations act in which it is contained.

For example, if the FY 2015 advance appropriations for the IHS were included in the FY 2014 appropriations bills, those advance appropriations would not be counted against the FY 2014 funding allocation but rather, against the FY 2015 allocation. If IHS had received advance appropriations they could begin operation immediately at the beginning of a new fiscal year without worrying whether or how long it might take Congress to pass a budget.

H.R. 3391 The Indian Health Service Health Professions Tax Fairness Act of 2013: The Friends of Indian Health, National Council on Urban Indian Health, the National Congress of American Indians and National Indian Health Board are advocating for a tax exempt status for IHS student loans. If passed, the savings would be enough to fund an additional 105 student loans. In October, a House bill (H.R. 3391) was introduced to enact this legislative fix for this issue.

Proposal to extend the Medicare-Like Rate cap on Contract Health Service referrals to all Medicare participating providers and suppliers: In April 2013, the Government Accountability Office (GAO) released a report that found that IHS could save \$32 million if IHS billed for nonhospital Purchased/Referred Care (PRC) (a.k.a. Contract Health Services) at rates similar to Medicare. The PRC program may be the only plan in the Federal Government that pays these high rates. Neither the Department of Defense nor the VA pays full billed charges for health care from outside providers. Nor do insurance companies, including those with whom the federal government has negotiated favorable rates through the Federal Employee Health Benefits program.

In the State of Oklahoma there are two major policy issues that would have a significant positive impact on the healthcare provided to American Indians and Alaska Natives:

Payments to Indian Health Service, Tribes, and Urban Indian Organization (I/T/U) health systems in Oklahoma for Uncompensated Care: Section 1115 demonstration waivers may be structured to authorize payments to I/T/U

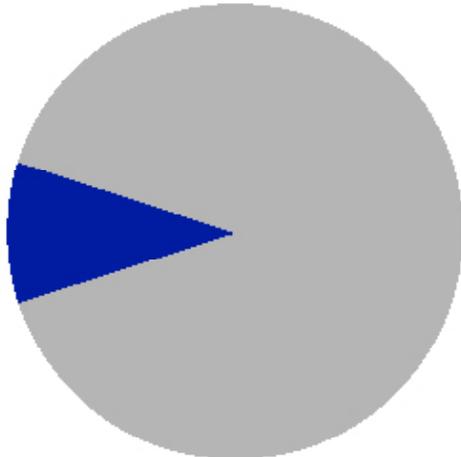
facilities for health care services, thus relieving the health care burden to the State for this uncovered population, and more generally cover otherwise uncompensated care. This Section 1115 demonstration authority existed prior to, and is not dependent upon, the Affordable Care Act (ACA), and does not further implementation of the ACA. Under the uncompensated care model, payments are made by a State Medicaid program to I/T/U facilities for services that would not otherwise be reimbursed under Medicaid, Medicare or private health insurance coverage. Payments are determined by a formula that is developed by the State as part of the waiver development process. This relationship is a partnership between the State and the I/T/U facilities, and does not result in any additional individual Oklahomans' entitlement for the Medicaid program.

Exemption of Indian Health Systems from Medicaid Cuts: The vast majority of health services rendered at Indian Health Service, Tribes, and Urban Indian Organizations (I/T/U) facilities are covered by 100% Federal Medical Assistance Percentage (FMAP). As such, services provided at an I/T/U are at no cost to the state and if Oklahoma Health Care Authority programs are eliminated it generates no state budget savings. Therefore, we propose that the waiver exempt services provided at I/T/U's and continue to provide payments to these facilities.

SUMMARY

Despite the long history of health disparities and social injustice, American Indians remain a vital force in Oklahoma. **Commercial tobacco use tops the list of health behaviors that require additional emphasis and resources.** Access to health care and opportunities for healthy living are improving as tribes, urban facilities, and IHS work with various partners across the spectrum to implement programs and services. Improved data on morbidity, mortality, and health behaviors at the tribal level is crucial to tribal self-determination. **The behavioral health needs are great among American Indians in Oklahoma.** With leadership, strong public health programs, and access to health care, our American Indians can achieve their health goals in the near future.

Section 9
HEALTH SERVICES



Is Charity Still Needed? Meet Lucy ... *Stanley F. Hupfeld, Health Alliance for the Uninsured, Oklahoma City*

Lucy Rodriguez sits quietly with her five-year-old daughter in the waiting room of a charitable clinic in Oklahoma City. Lucy's daughter is running a high fever. Outside of a local hospital emergency room this free clinic is one of the few places she can go to receive care for her child.

Lucy's particular problem is not that she is unemployed, nor unwilling to find a job to take care of her family's various needs. Lucy in fact works three jobs, none of which provide her health insurance. In all three jobs she is allowed to work only enough hours to qualify her as a part-time employee. In two of her jobs she works in fast food restaurants, and in the third Lucy works as a domestic.

She is not a vagrant, not unmindful of her responsibilities as a provider for her three children. In the three jobs Lucy works totaling almost 80 hours a week her income makes her too rich to qualify for the state Medicaid program. Therefore, she must depend on the largesse and kindness of volunteers in a free clinic such as the one she is currently visiting.

Greater Oklahoma City is unique in that it has more charitable clinics per capita than any major city in the United States.

The majority of these clinics (nineteen) are affiliated with churches that see the service of providing care to the poor as part of their mission.

In many other communities throughout the state charitable clinics are not unusual, in fact there are fifty to sixty similar clinics throughout Oklahoma.

Despite the progress and accomplishments of these safety net providers, care of the underserved in Oklahoma County and in the rest of Oklahoma remains mostly disorganized and ill prepared to address the significant health needs of that particular population. Routinely these clinics are staffed by volunteer doctors and nurses who serve as the last resort for citizens like Lucy.

In Oklahoma County there are over 90,000 individuals such as Lucy with household incomes at or below 200% of the poverty level.

It is for this population that these clinics exist in large part as their only source of care. Research indicates that the uninsured are generally less healthy and suffer from higher rates of chronic disease. They tend to die younger and have limited access to routine medical care. The poor health of Oklahomans is well documented. Much of our regrettable record is due to poor health habits but clearly a lack of access to significant medical care is an additional causative factor.

Years ago the numerous charitable clinics in Oklahoma County came together to form the Health Alliance for the Uninsured. HAU's referral service serves charitable clinics and community health centers. Clinics generally are open limited hours but in a short space of time they see hundreds of patients just like Lucy. As these clinics treat this underserved population they naturally uncover significant pathology consistent with the higher degree of chronic disease exemplified by their poor health status. The requirement of these clinics is to treat this pathology to the extent that they have



time, resources, and technology to do so. However, the severity of the problem often exhausts the clinics' limited capability.

The need exists then to move these patients to higher levels of care. They must do so quickly in order to not exacerbate a patient's often critical needs. Thus, the HAU determined that their success was imminently tied to soliciting tertiary services from specialists and hospitals in their community. For the last several years HAU has managed a referral service that takes requests from a clinic and attempts to match it to a volunteer specialist to satisfy these patients' more complex needs.

Two years ago the HAU embarked on a strategic planning process in order to insure a more expeditious and higher quality care in these respective clinics.

1. Part of this strategic plan called for a single strong referral system that would eliminate duplication and redundancy of requests to specialists and hospitals.
2. The second major recommendation called for the development of a case manager system. This population, often with language difficulties and limited transportation capability, needs to move through the complex medical system with greater ease.
3. Finally, the plan suggested the clinics move from simply an intake and treatment posture to that of a medical home. In that structure they would act more like a primary care physician for their respective patients. As a medical home they would assume more sophisticated responsibility for the care of their patients thus alleviating the volunteer specialist from acting as a primary care doctor. This, in turn,

would make specialists be more interested in volunteering their services. The specialist could volunteer their services for their particular piece of the clinical regimen without worrying that they would have to fill the need of a primary care physician.

In a post health reform world the most obvious question is, "What is the need for charitable clinics?" After all, the idea behind the Affordable Care Act was to insure all Americans had some sort of coverage.

There remain huge gaps into which families such as Lucy's fall because the State of Oklahoma refused to expand its Medicaid program. There is a huge gap between the currently eligible Medicaid population on the bottom end of income, and those getting a subsidy at the higher end.



Lucy and family: Photo provided by Stanley Hupfeld

In addition, many physicians in this state refuse to see Medicaid patients under any circumstances. And thirdly, even those who qualify for a governmental subsidy are often forced to choose high deductible plans of which they have little hope of satisfying the deductible.

This makes them essentially uninsured.

The Lucy's of this state, all good citizens, through no fault of their own find themselves in desperate situations. The charitable clinic becomes the only source of care for their families. If her family's needs exhaust the resources of the clinic, then she must depend on volunteer doctors and hospitals to come to her aid.

Our charitable clinics continue to do great work on behalf of this at risk population. While this is a story that the health community in Oklahoma should be proud, recent political events have served to be a disservice toward low income individuals.

The Remaining Uninsured v1.0

Carly Putnam, Policy Analyst, Oklahoma Policy Institute

With the major health coverage expansion provisions of the Affordable Care Act taking effect at the beginning of 2014, there has been substantial progress made towards reducing the number of Americans without health insurance. However, it is also clear that a significant number of people will remain without coverage, especially in states like Oklahoma that have so far opted not to accept federal dollars for extending Medicaid coverage to low-income adults. This brief focuses on the Oklahomans who remain uninsured — their demographics (income, race, gender, immigration status); health issues encountered by the uninsured; the ongoing impact on the Affordable Care Act on the uninsured; and the limited sources of affordable health care for those without insurance.



Among those up to 138 percent FPL, men are somewhat more likely to be uninsured (31.8 percent) than women (29.1 percent)³. This may be in part due to Oklahoma's Medicaid program offering coverage for very low-income parents of dependent children, and because single mothers caring for children are somewhat more common than single fathers. Across the state's general population, the parents of dependent children are slightly more likely to be insured than those without children (21 percent versus 27 percent).

The uninsured rate varies across racial and ethnic lines⁴ — with a notable exception for Black Oklahomans, who constitute 7 percent of the population and 7 percent of the uninsured. White Oklahomans constitute 72 percent of the population but only 55 percent of the uninsured. Hispanic Oklahomans are 10 percent of the population but 15 percent of the uninsured. (Please note that people who identify as Hispanic can be any race.) Other racial and ethnic groups make up 24 percent of the uninsured.

Undocumented immigrants are disproportionately uninsured, and they would not gain access to health insurance were the state to accept federal funds to extend coverage. Approximately 75,000 undocumented immigrants reside in Oklahoma⁵. No strong state-specific estimates of uninsured rates among the undocumented exist, but nationwide, 51 percent of undocumented immigrants are uninsured⁶, and two-thirds of these expected to remain uninsured despite the individual mandate to purchase insurance under the Affordable Care Act.

While undocumented workers may have access to private insurance, this is likely a very small percentage⁷ — many insurers require applicants to provide social security numbers, and undocumented migrants don't have access to subsidies on the health insurance marketplaces,

Who they are:

Low-income Oklahomans are more likely to be uninsured than wealthier Oklahomans. Men are slightly more likely to be uninsured than women, and racial and ethnic minorities are more likely to be uninsured than white Oklahomans. Undocumented immigrants are largely left out of the Affordable Care Act — they are often uninsured and have very few avenues through which to gain insurance.

According to the Kaiser Family Foundation's most recent data, 638,100 Oklahomans¹ were uninsured in 2012, about one in every six Oklahomans (17 percent). This data does not account for those may have gained or lost coverage since then, particularly due to the full implementation of the Affordable Care Act. Adults living in or near poverty are especially likely to be uninsured.

Among Oklahomans age 19-64 making up to 138 percent of the federal poverty level (FPL), 45 percent are uninsured as of 2012.² This is the population that could have gained access to affordable health insurance if the state accepts federal funds to expand health coverage.

which typically leaves insurance unaffordable. In general, undocumented people seek health care ⁸ less often than the general population. It is unclear if this is due to better health status or fear that contact with authorities, including health care providers, may lead to arrest or deportation. There are anecdotal indications ⁹ that undocumented workers in Oklahoma may avoid seeking care, even for emergencies, because of the fear of arrest or deportation.

Oklahoma's Native Americans are uninsured at a higher rate than the general population. The uninsured rate for Oklahoma's Native American population age 18 – 64 is 32 percent ¹⁰, nearly ten points higher than for the overall adult population. American Indian/Alaska Native individuals with access to insurance only via Indian Health Services (IHS) have not been counted as insured, because IHS typically only qualifies holders to primary care. Approval for referrals for specialized services, from childbirth to cancer treatment, is infrequent. Furthermore, IHS access is contingent on being officially enrolled in one of Oklahoma's 38 federally recognized tribes, and there is a significant gap between official enrollees and those who claim but cannot or have not proven membership.

Health status of the uninsured:

People without health insurance tend to have poorer health status than people with insurance, in large part because they are typically unable to access preventive care or follow-up care. Oklahoma sees high rates of a number of conditions whose treatment is far less expensive and disruptive if the conditions are caught early; unfortunately, they often aren't. People without insurance are much more likely than their insured counterparts to go without needed care or medication due to cost.

The uninsured frequently have poorer health than their insured peers. According to the Kaiser Family Foundation, "Uninsured people are less likely to receive preventive care, are more likely to be hospitalized, and are more likely to die in the hospital than those without insurance." ¹¹ In a

2012 report, Families USA estimated that 2,424 people aged 25-64 died in Oklahoma between 2005 and 2010 because they lacked health insurance ¹². Families USA also estimated that not having health insurance killed 9 people aged 26-64 every week in Oklahoma in 2010 (452 for the year) ¹³.

Health status is closely correlated with income, and in Oklahoma, only those who are both low-income and have disabilities are covered by Medicaid. Another 18,500 Oklahomans are covered by Insure Oklahoma, but roughly one-third of them (7,000) will likely lose that coverage and be ineligible for subsidies on the health insurance marketplace if Insure Oklahoma's waiver expires at the end of the year ¹⁴. Many of the unhealthiest unable to access affordable health care.

Many of the Oklahomans without health insurance are also very unhealthy. Studies estimate that about 1 in 4 Americans have a chronic disease, but that nearly half (45 percent) of non-elderly uninsured adults report at least one chronic health condition ¹⁵. Diseases shown to correlate with poverty – such as asthma, diabetes, heart disease, and obesity ¹⁶ – are widely prevalent in the state, and are especially concentrated among the uninsured.

These diseases are all treatable conditions if addressed early on, but can kill if they go undiagnosed or untreated. Mortality statistics show that too many Oklahomans aren't getting treatment for these conditions: Oklahoma ranks first in the US for deaths due to chronic lower respiratory disease, third for deaths from heart disease, fourth for deaths from stroke, and fourth for deaths from diabetes.

Even if uninsured Oklahomans are able to see a doctor to diagnose any of the above diseases, they may not be able to pay to treat them. A 2005 study by the Robert Wood Johnson Foundation and the Urban Institute found that uninsured adults with chronic health conditions were "over 20 percentage points less likely than insured adults with chronic conditions to have had visits to a health professional in the past 12 months." ¹⁷

Furthermore, 49 percent of uninsured adults with chronic conditions reported “forgoing needed medical care or prescription drugs due to cost.”

¹⁸ They were 4.5 times more likely than their uninsured counterparts to report “unmet need for medical care or prescription drugs in the 12 months prior to the survey.” ¹⁹

Similarly, uninsured adults – including those with chronic conditions and those without - are nearly four times more likely ²⁰ than insured adults to delay or forgo preventive care due to cost (36 percent vs. 10 percent). As a result, they are more likely to be diagnosed with certain advanced cancers ²¹ and are 25 percent more likely to die prematurely ²². Even for those who do obtain treatment, it can impose severe financial strain; 60 percent of uninsured adults report having problems with medical bills or medical debt ²³.

Impact of the Affordable Care Act:

While Oklahoma saw low enrollment on the online marketplaces, it saw very high enrollment in traditional Medicaid programs.

Oklahoma had the sixth-lowest signup rate during the first open enrollment period (Oct 1, 2013 – March 31, 2014) of the Affordable Care Act’s health insurance marketplace. In that period, 69,221 Oklahomans selected a marketplace plan, approximately 15.5 percent of the total potential marketplace population in the state (446,000).

²⁴ The US average was 28.0 percent of potential enrollees selecting a plan. This means that a significant number of Oklahomans who were eligible to enroll in health insurance plans did not. That number is expected to decline in the next enrollment period, particularly after fees for failing to sign up for health insurance in the 2013-2014 open enrollment period are assessed.

However, Oklahoma’s Medicaid enrollment increased significantly during the same time period. Oklahoma saw a strong “woodwork effect” – people who were eligible for Medicaid but had not previously enrolled signing up during the open enrollment period. Oklahoma’s Medicaid enrollment grew by 5 percent – 32,378 people – during that open enrollment time frame ²⁵.

According to a study by Avalere Health, Oklahoma saw the 7th largest “woodwork effect” of all 50 states ²⁶.

Access to care

For Oklahomans without health insurance, there are very few health care options available. Federally qualified health centers are financially vulnerable; Medicaid cuts may force some rural providers to limit hours or close altogether; and free clinics typically don’t allow for specialized treatments or follow-up care.

There are few affordable, accessible health care options for Oklahomans without health insurance. Federally qualified health centers (FQHCs) are important sources of care but are financially vulnerable. A variety of federally qualified health centers in Oklahoma (Variety Care, Morton Comprehensive Health Systems, etc.) serve those in need of care, regardless of ability to pay.

However, the state fund that FQHCs draw from to cover uncompensated care at those facilities – about \$3 million for the year – dried up a full seven months earlier than anticipated in FY 2014 ²⁷. This year, due to the state’s budget shortfall the FY 2015 uncompensated care fund was reduced to a little over \$2 million ²⁸. It is unclear if FQHCs will be able to locate alternative funds to cover uncompensated care in their facilities, or if they will close.

To cover a Medicaid budget shortfall, the Oklahoma Health Care Authority has approved significant provider rate cuts and copayment increases. Copay increases have been shown to reduce usage of essential medication and lead to worse health outcomes, which could increase costs later ²⁹. Rural hospitals are expected to be hardest hit by reimbursement cuts for Medicaid providers, which may force rural care providers to close altogether.

Some free clinics allow patients to receive limited health services, but with little continuity of care. Tulsa’s Bedlam Evening and Bedlam Longitudinal clinics, and North Tulsa’s Tisdale Clinic, provide some access to both primary and specialized care

for those who are able to reach them and who qualify. One care provider at Bedlam Longitudinal told me about a patient whose daughter drives her an hour and a half for routine care at the clinic. But these clinics are outliers and are not able to serve the vast majority of uninsured Oklahomans in need of health care.

END NOTES

- 1 “Health Insurance Coverage of the Entire Population.” Kaiser Family Foundation. 1 May, 2014. <<http://kff.org/other/state-indicator/total-population/?state=OK>> (22 June 2014)
- 2 “Health Insurance Coverage of Adults (19-64) with Incomes up to 138% of the Federal Poverty Level (FPL).” Kaiser Family Foundation. 1 May 2014. <<http://kff.org/other/state-indicator/adults-under-139-fpl/?state=OK>> (22 June 2014)
- 3 “Oklahoma.” State Health Access Data Assistance Center. 2012. <<http://datacenter.shadac.org/profile/72,50#38/oklahoma/percent,moe,count/a/hide>> (29 June 2014)
- 4 “Distribution of the Nonelderly Uninsured by Race/Ethnicity.” Kaiser Family Foundation. 1 May 2014. <<http://kff.org/uninsured/state-indicator/distribution-by-raceethnicity-2/?state=OK>> (22 June 2014)
- 5 Jeffrey S. Passel, D’Vera Cohn, “Unauthorized Immigrant Population: National and State Trends, 2010,” Pew Hispanic Research Historic Trends Project, 1 February 2011, <<http://www.pewhispanic.org/2011/02/01/appendix-a-additional-figures-and-tables/>> (22 June 2014).
- 6 Steven P. Wallace, Jacqueline M. Torres, Tabashir Z. Nobari, and Nadereh Pourat, “Undocumented and Uninsured: Barriers to Care for Immigrant Populations,” The Commonwealth Fund, August 2013, <http://www.commonwealthfund.org/~media/Files/Publications/Fund%20Report/2013/Aug/1699_Wallace_undocumented_uninsured_barriers_immigrants_v2.pdf> (22 June 2014).
- 7 Chase Cook, “Prospects Are Few for Undocumented Immigrants in Failing Health,” Oklahoma Watch, 11 June 2013. <<http://oklahomawatch.org/2013/06/11/prospects-are-few-for-undocumented-immigrants-in-failing-health/>> (22 June 2014).
- 8 Venetia Lai, Gwen Driscoll, “State’s undocumented immigrants use fewer health services than US-born residents,” UCLA Newsroom, 5 May 2014, <<http://newsroom.ucla.edu/releases/state-s-undocumented-immigrants-use-fewer-health-services-than-u-s-born-residents>> (22 June 2014).
- 9 “Day 20: The Politics of Crime and Immigration,” The New York Times, 6 June 2014, <http://www.nytimes.com/interactive/2014/us/the-way-north.html?_r=1#p/20> (22 June 2014).
- 10 “Distribution of the Nonelderly Uninsured by Race/Ethnicity,” Kaiser Family Foundation, 1 May 2014, <<http://kff.org/uninsured/state-indicator/distribution-by-raceethnicity-2/?state=OK>> (22 June 2014).
- 11 “The Uninsured: A Primer / Key Facts about Health Insurance on the Eve of Health Reform,” October 2013, Kaiser Family Foundation, <<http://kaiserfamilyfoundation.files.wordpress.com/2013/10/7451-09-the-uninsured-a-primer-key-facts-about-health-insurance.pdf>> (22 June 2014).
- 12 Kim Bailey, “Dying for Coverage: The Deadly Consequences of Being Uninsured,” Families USA, June 2012, <<http://familiesusa.org/product/dying-coverage-deadly-consequences-being-uninsured>> (22 June 2014)
- 13 Ibid.
- 14 “Insure Oklahoma Summary,” Insure Oklahoma, 12 May 2014, <<http://www.insureoklahoma.org/IOaboutus.aspx?id=4096>> (22 June 2014)
- 15 “Uninsured Americans with Chronic Health Conditions: Key Findings from the National Health Interview Survey,” Robert Wood Johnson Foundation, May 2005, <http://www.rwjf.org/content/dam/farm/reports/surveys_and_polls/2005/rwjf11441> (22 June 2014)
- 16 “Oklahoma Annual State Health Rankings,” America’s Health Rankings, 2014, <<http://americashealthrankings.org/OK/2014>> (22 June 22, 2014)
- 17 “Uninsured Americans with Chronic Health Conditions: Key Findings from the National Health Interview Survey,” Robert Wood Johnson Foundation, May 2005, <http://www.rwjf.org/content/dam/farm/reports/surveys_and_polls/2005/rwjf11441> (22 June 2014)
- 18 Ibid.
- 19 Ibid.
- 20 “Help on the Horizon: How the Recession Has Left Millions of Workers Without Health Insurance, and How Health Reform Will Bring Relief— Findings from The Commonwealth Fund Biennial Health Insurance Survey of 2010,” The Commonwealth Fund, 16 March 2011, <<http://www.commonwealthfund.org/publications/fund-reports/2011/mar/help-on-the-horizon>> (22 June 2014).
- 21 DT Farkas, A Greenbaum, V Singhal, JM Cosgrove, “Effect of insurance status on the stage of breast and colorectal cancers in a safety-net hospital,” The American Journal of Managed Care, May 2012, <<http://www.ncbi.nlm.nih.gov/pubmed/22693983>> (22 June 2014)
- 22 “America’s Uninsured Crisis: Consequences for Health and Health Care,” Institute of Medicine, 23 February 2009, <<http://www.iom.edu/Reports/2009/Americas-Uninsured-Crisis-Consequences-for-Health-and-Health-Care.aspx>> (22 June 2014).
- 23 “Help on the Horizon: How the Recession Has Left Millions of Workers Without Health Insurance, and How Health Reform Will Bring Relief— Findings from The Commonwealth Fund Biennial Health Insurance Survey of 2010,” The Commonwealth Fund, 16 March 2011, <<http://www.commonwealthfund.org/publications/fund-reports/2011/mar/help-on-the-horizon>> (22 June 2014).
- 24 “Marketplace Enrollment as a Share of the Potential Marketplace Population,” Kaiser Family Foundation, 19 April 2014, <<http://kff.org/health-reform/state-indicator/marketplace-enrollment-as-a-share-of-the-potential-marketplace-population/>> (22 June 2014).
- 25 Jaclyn Cosgrove, “Oklahoma’s Medicaid program has grown almost 5 percent since marketplace opened,” The Oklahoman, 1 May 2014, <<http://newsok.com/oklahomas-medicaid-program-has-grown-almost-5-percent-since-marketplace-opened/article/4745231>> (22 June 2014).
- 26 “Avalere Analysis: Medicaid Non-Expansion States Experience Up to 10% Enrollment Growth Due to Woodwork Effect,” 13 May 2014, <<http://avalerehealth.com/expertise/managed-care/insights/avalere-analysis-medicaid-non-expansion-states-experience-up-to-10-enrollme>> (22 June 2014).
- 27 Carly Putnam, “‘I don’t know where we go from here: Community health centers caught in limbo,’” Oklahoma Policy Institute, 7 April 2014, <<http://okpolicy.org/dont-know-go-community-health-centers-caught-limbo>> (22 June 2014)
- 28 “Impact of Reductions to OSDH State General Appropriations & Trauma Care Assistance Revolving Fund,” Oklahoma State Department of Health, 8 June 2014, <<https://dl.dropboxusercontent.com/u/19732897/Impacts%20of%20Reductions%20to%20State%20Allocation%2006-08-14.docx>> 22 June 2014
- 29 Carly Putnam, “Oklahoma could hike fees on the poorest and sickest citizens,” Oklahoma Policy Institute, 28 May 2014, <<http://okpolicy.org/oklahoma-hike-fees-poorest-sickest-citizens>> (22 June 2014)

The Remaining Uninsured v2.0

Brent Wilborn, Director of Public Policy, Primary Care Association of Oklahoma, Oklahoma City

At issue here is the correct public policy for the provision of health insurance to able bodied adults who earn an income below the federal poverty level (\$11,670/individual or \$15,730/family of two). Some say these Oklahomans must receive free Medicaid via program expansion. Others say that an able bodied adult should be able to earn this amount as it is below the minimum wage. You decide where to place your public policy sympathies.



employees for their health coverage costs. Entrepreneurs and the self-employed appreciated the range of plans available as they pursue their endeavors.

November 2013 - March 2014 marked the first open enrollment period for uninsured Oklahomans to purchase “Obamacare” health insurance plans, plans that significantly subsidize low-income Oklahomans. This article describes that period.

Open Enrollment

Oklahoma’s state motto reads, “*Labor omnia vincit*” – Latin for, “Labor conquers all things.” This was reflected in the experience of those who assisted the public in the first open enrollment period for Qualified Health Plans in the Health Insurance Marketplace. Workers from a wide range of Oklahoma industries and agriculture sought assistance. Marketplace assisters worked with independent truck drivers, long term care aides, farmers and ranchers, and those between jobs in the oil and gas industry.

Motives

In visiting with assisters in Oklahoma, it seems that consumers, in general, placed a high value on local help, family, and flexibility. Many seemed to appreciate that someone nearby was available to answer questions. Family was emphasized in examples such as working multiple jobs to meet family time obligations or the fact that many sought help for family members who had gone without health care. Some job creators liked the flexibility that individual coverage was now more easily available since they wanted to preserve the privacy of their employees yet still compensate

The uninsured had many motivations to enroll in affordable coverage. They sought coverage because their pre-existing condition had previously made insurance too costly, or because they knew the value of having health insurance due to prior family experience. Only for a few was the individual shared responsibility payment a driver toward enrollment.

Results

Close to 70,000 Oklahomans enrolled in plans during the October 2013 to March 2014 open enrollment period. Similar to what occurred across the country, over half of Oklahomans signed-up during the final six weeks, which meant a rate of about 6,000 enrollments per week during that time. While this exceeded some first year goals, this is a relatively small dent in the hundreds of thousands of Oklahomans lacking health insurance. Interest was far larger than these numbers reveal, however. Many were not eligible for premium assistance because their income was too low. As a case in point, one community organization held a related outreach event in which about 300 persons sought assistance. Staff estimated that about three quarters of those persons had income too low to be eligible for premium assistance.

The Future

Estimates vary about the proportions of persons who would remain uninsured after implementation of the Affordable Care Act. Some of those estimates were adjusted downward following the Supreme Court decision in 2012. The authors of a 2013 *Health Affairs Blog* post predicted that roughly 50% or 80% of Oklahoma’s uninsured would remain without health coverage depending on whether Oklahoma expanded Medicaid

eligibility.¹ In the future it is certain that substantial numbers of the uninsured are expected to be in the lower income ranges.

Insurance is critical to protecting the lives and finances of Oklahomans, and is an important tool in addressing ability to pay for services though many who are newly insured need help learning how to put their insurance to work. However, the health care safety net must also address those who do not obtain insurance and provide means to overcome non-financial barriers to accessing timely and appropriate service. Obviously, whether insured or not, appropriate services must be available to achieve improved health outcomes.

In regard to having a place to seek primary care, themes from open enrollment again apply. Patient input and behaviors indicate that health care is more readily utilized when convenient, accessible, and tailored to the needs of the local population and individual patients. Perhaps, multiple services are needed the same day for those with limited ability to take leave from work or a single parent needs to be able to make same day appointments for the parent and the children due to the expense of travel. The volunteered words of one patient emphasize the importance of convenience and local relationship:

Growth of Health Centers

“We need a place close to home which the community health center provides...where we feel welcome and know our needs are going to be met medically, by friendly caring medical people.” -- Mary, Oklahoma community health center patient

Community health centers are one part of the safety net that is designed with these factors in mind. These entities have developed substantially since the last Oklahoma Academy Town Hall that addressed health care in 2002. Just prior to that time, Oklahoma had fewer health centers than one could count on two hands. Community leaders around the state have rolled up their sleeves, formed nonprofit organizations with community-oriented boards of directors, and successfully applied to take advantage of the multi-year

Health Center Growth Initiative rolled out when President Bush came into office in 2001. Since that time, and with support across administrations and Congresses, health centers have grown to serve over 150,000 Oklahomans of Medically Underserved communities in over sixty locations.

Accepting all age groups and payer sources, patients are offered primary medical, dental, behavioral health, and a host of other support services. These services are made affordable, not free, via sliding fee scales with discounts for those under twice poverty guidelines. Hours and the group of services offered are determined by a patient-majority board of directors. Meeting the unique needs of a given community such that individuals obtain more consistent care results in substantial reductions in overall health care costs.

In fact, by conducting econometric analysis of Medical Expenditure Panel Survey data, one 2012 study found that patients who received a majority of their care from health centers had significantly lower overall medical expenditures -- by 24%.²

More money in health care will not, in of itself, improve health outcomes, but perhaps far more of the amount of dollars already in current system could positively impact outcomes by proactively addressing individual and local needs that are outside of clinical decision-making.

Let's take another look at policies, leverage resources, and create an environment in which people are afforded the dignity of paying what they are able, health insurance coverage is more widely available, freedom and flexibility are preserved, and incentives and partnerships support added health care capacity for underserved communities.

1 Nardin, R., et al. (2013, June 6). The Uninsured After Implementation Of The Affordable Care Act: A Demographic And Geographic Analysis [Web log comment]. Retrieved from <http://healthaffairs.org/blog/2013/06/06/the-uninsured-after-implementation-of-the-affordable-care-act-a-demographic-and-geographic-analysis/>.

2 Richard P, et al. (2012). Cost savings associated with the use of community health centers. Journal of Ambulatory Care Management. 35(1):50-59.

Access to Services in Oklahoma County

Gary Cox, JD and Alicia Meadows, MPH, MBA, Oklahoma City-County Health Department

Local Health Departments can and should play a critical role in the improvement of access to services in the state of Oklahoma.

The OCCHD actively seeks to engage providers of all types in developing and sustaining coordinated care models that aggressively seek to assure health services are provided at the right time, at the right place and with the right provider. Taking this approach is challenging with existing privacy laws, electronic data collection, and market competition each presenting unique stakeholders and perspectives.

Local health departments have the capacity to serve as the experts in population health management strategies, and are also the repository to the data and information needed to drive strategies to improve population health.

The OCCHD has worked diligently to be a relevant and impactful agency in supporting the alignment and coordination of strategies in the Oklahoma City metro area, and the requirements set forth by the Patient Protection and Affordable Care Act (ACA) provide both incentives and consequences for our provider communities if we do not change the way we provide care in our at-risk and underserved communities.

Specific policy and program development of benefit to all Oklahomans, currently being piloted within the Oklahoma County metropolitan area are being funded utilizing local tax levy and a combination of public and private funding from other state and national resources.

The following strategies and recommendations to expand successful policy and systems improvements include:

Reimbursement Mechanisms for Non-

Traditional Providers: The Community Health Worker (CHW) has proven to be an effective position within the community health care team, working among multiple providers as a low-cost liaison to individuals categorized as inappropriately utilizing high-cost health care services, e.g., emergency departments for routine source of care. The OCCHD, through leveraged funds, is developing a modular, on-line CHW curriculum. CHWs have been well received in practice and community settings, but do not currently qualify for reimbursement through public or private health insurance.

CHWs are capable of managing higher volume caseloads at a lower per patient cost than traditional nurse and social worker case management positions. Increasing community access to the appropriate type of care through low cost case management and case finding should be a priority for population health management strategies.

Developing policies that enable the Oklahoma Healthcare Authority to reimburse for services provided by the CHW would incentivize private insurance providers to follow suit. Case studies demonstrate returns on investment within 12 months of integrating CHWs into multi-disciplinary care teams.

Funds to expand the CHW workforce are tied to the ability to draw reimbursement through established payment systems.

Policy and Systems to Support Data Sharing and Management:

Integration of preventive, primary and mental health services hinges on the ability of independently governed providers to effectively share patient population health data. State systems to support data exchange between

We Can Do Better ... Women and Children

Jan Figart, MS, RN, Community Service Council

Health is contributed to by a myriad of individual and system factors—genetics, demographic attributes, health status, health behaviors, health care utilization, environmental factors, family factors, social support, health care system characteristics, care processes, and health insurance. Without health insurance, access to services is inhibited for women and their families—particularly the poor, and racial/ethnic minorities (Kaiser Family Foundation, 2013a).

According to Institute of Medicine, *Care Without Coverage: Too Little, Too Late* (2002) health insurance coverage is associated with better health outcomes, having a regular source of care, greater and more appropriate use of health services, management of chronic illnesses, and improved health outcomes.

Women make approximately 80% of health care decisions on behalf of multiple generations of their family (Rustgi, Doty, & Collins, 2009). Women, however, have a greater lifetime need for health care (driven by the reproductive years) and are more likely to go without needed care (Robertson & Collins, 2014).

The failing economic recovery characterized by stagnate wages, and underemployment, the gender difference in pay (U.S. Bureau of Labor Statistics, 2014) and the lack of Medicaid expansion have contributed to the continued gap in access to health insurance and the potential it offers in improving the health of women and their children (Kaiser Family Foundation, 2013b).

Uninsured nonelderly adults (2011-2012) in Oklahoma were 515,000 of which 79% are minorities (Kaiser Family Foundation, 2013). The insurance marketplace enrolled 69,221 individuals during the open market place October 1, 2013 to March 31, 2014 (Department of Health and Human Services, 2014a). Additionally, 38,278 Oklahomans enrolled in Medicaid/CHIPs

(including Insure Oklahoma) through the end of March 2014 (Department of Health and Human Services, 2014a). Access to the marketplace provided access to health insurance to a population of 56% women, and 36% under 35.

The unprecedented access to health care improved access to women and their families for preventive health care with no co-pay or deductibles; insured maternity services and contraception coverage; ended discrimination in premiums for women, and preexisting conditions; and ended lifetime limits and annual limits in insurance (Department of Health and Human Services, 2014b).

Expanded coverage insured mental health and substance use disorder coverage providing access to 774,018 Oklahoman not previously insured, and extended coverage under parent's health insurance policies for young adults until they turn 26 allowing 49,000 access to insurance in Oklahoma (Department of Health and Human Services, 2014a).

For children access to 26 covered preventive services have been guaranteed including previously not covered services--autism screening for children at 18 and 24 months, depression screening for adolescents, oral health assessment for young children less than 10 years, and vision screening for all children (Department of Health and Human Services, 2014c).

The promise of the Affordable Care Act for closing this gap further to include Medicaid coverage for adults from 0 to 138% FPL (a family of four income of \$30,000 or less) was not realized in Oklahoma when the Governor and lawmakers chose to not expand Medicaid or provide a viable Oklahoma Plan to substitute for the expansion.

The lack of Medicaid expansion in Oklahoma has created a gap of 219,000 people, many unable to afford the unsubsidized premium (extended to

families through the insurance marketplace) or the co-payments and deductible (Kaiser Family Foundation, 2013b).

A complex problem requires complex answers. Although health insurance coverage access provides a window of opportunity for women and their families to access health care, the Oklahoma health care system is prepared neither for the increased demand, or the unique problems of low-income families in to have resources to maintain health.

Oklahoma is ranked 44th (up from 50th) in the America's Health Rankings in overall health. Contributing to this poor ranking is the hospitalizations from preventable diseases and hospitalizations from heart disease, diabetes, cancers, and chronic obstructive pulmonary disease (United Health Care, 2014).

The underlying health behaviors include poor nutrition, lack of exercise, and risky behaviors (smoking, drug use, and alcohol use). Lack of family economic viability is contributed to by poor education attainment and mental health problems that are more likely to contribute to overeating, smoking, drinking and drug use.

As an example, obesity is 34.8% of high school graduates, and 26.1% in college graduates. The lack of prevention education in schools through a comprehensive health education plan contributes to the lack of knowledge in basic health concepts to maintain health or prevent disease.

Oklahoma has an inadequate physician, nursing and ancillary health workforce to meet the current health care demands that is exacerbated by the increase in covered consumers. Workforce will continue to deteriorate as the aging health workforce reaches retirement and limited replacements exist.

College healthcare professional programs cannot expand due to lack of master's and doctoral prepared educators (Department of Health and Human Services, Health Resource

Services Administration, 2014). This physician shortage extends to both primary care providers, and specialists (neonatologist, perinatology, developmental pediatricians, adolescent pediatricians, child psychiatrists, pediatric neurologists, pediatric urology, geneticists, etc.). The results are diminished health providers outside of urban health centers further collapsing rural health care.

Hospital closures, reduced services because of declining facility infrastructure in rural areas, and high numbers of uncompensated uninsured will reduce the number of hospitals in Oklahoma upward of 21% in the next five years (Budryk, 2013). Lack of Medicaid expansion to close the gap in loss of Disproportionate Share Hospital (DSH) funding beginning in 2016 will increase the number of women and their families having to drive upwards of 50 miles to access prenatal or birthing facilities, access to emergency services, and hospital care.

What can be done to significantly improve women and children's health?

(1) Oklahoma's perfect storm of health system and individual health concerns can only be navigated with a combination of health, economic, education, and social policies and legislation. Economic challenges of families can only be addressed by improved economic potential through minimum wage increase, expansion of affordable housing, ending predatory lending practices (housing, and pay day loans), and reduction of underemployment.

(2) Education leading to full employment needs to include comprehensive health education Kindergarten through twelfth grade. The focus of comprehensive health education should include nutrition, risk behavior reduction, hygiene, health promotion, and disease prevention. All children should have access to healthcare co-located at school sites particularly for preventive education and counseling services.

(3) Healthcare workforce development requires a systematic development from middle school

through completion of graduate courses. Development includes career exploration, and rigorous science and math options in middle and high schools; and tuition supports for entry into health care fields. Colleges and universities offsetting courses for joint high school and college credit to substantially decrease college completion time and increase high school completion rates. College and university faculty development through tuition reimbursements or loan reductions to allow expansion of health professional education.

(4) Medicaid expansion to improve financial stability of hospitals and providers by reducing uncompensated care. Additionally, Medicaid expansion improves the economic potential of individuals and families by reduction of medical bankruptcies, and lost wages from chronic illness. Medicaid expansion would improve the health of individuals by providing access to preventive healthcare.

(5) Health literacy improvement for providers and consumers to better understand navigating insurance, and health care systems.

(6) Environmental strategies to reduce contaminated water, air and food.

(7) Health behaviors can only be improved with access to nutritious food, safe neighbors, disposable income for health maintenance activities, and knowledge of the importance of health and its sustainment.

Oklahoma's health outcomes for women and their families will improve through an iterative process of quality and cost improvements. The poor health "hole" Oklahomans have dug for themselves over the last forty years through failing health care system and health outcomes will require the same amount of time to correct. Complicated solutions require thoughtful engagement of all stakeholders—consumers, health providers, business, and legislators.

But first ... we have to STOP digging.

References

Kaiser Family Foundation. (2013a, August). What is Medicaid's impact on access to care, health outcomes, and quality of care? Setting the record straight on the evidence. Retrieved from <http://kff.org/medicaid/issue-brief/what-is-medicaids-impact-on-access-to-care-health-outcomes-and-quality-of-care-setting-the-record-straight-on-the-evidence/>

Institute of Medicine. (2002). Care without coverage: Too little, too late. Retrieved from <http://www.iom.edu/Reports/2002/Care-Without-Coverage-Too-Little-Too-Late.aspx>

Rustgi, D., Doty, M. & Collins, S. (2009, May). Women at risk: Why many women are forgoing needed health care. Retrieved from http://www.commonwealthfund.org/~media/Files/Publications/Issue%20Brief/2009/May/Women%20at%20Risk/PDF_1262_Rustgi_women_at_risk_issue_brief_Final.pdf

Robertson, R. & Collins, S. (2011, May). Realizing health reform's potential--Women at risk: Why increasing numbers of women are failing to get health care they need and how the Affordable Care Act will help. Retrieved from http://www.commonwealthfund.org/~media/Files/Publications/Issue%20Brief/2011/May/1502_Robertson_women_at_risk_reform_brief_v3.pdf

U.S. Department of Labor, Bureau of Labor Statistics. (2014). Wage and earnings, 2013. Retrieved <http://www.bls.gov/cps/earnings.htm>

Kaiser Family Foundation. (2013b, December). The impact of the coverage gap in states not expanding Medicaid by race and ethnicity. Retrieved from <http://kff.org/disparities-policy/issue-brief/the-impact-of-the-coverage-gap-in-states-not-expanding-medicaid-by-race-and-ethnicity/>

Department Health and Human Services, Centers for Medicare and Medicaid Services. (2014a). How the health care law is making a difference for the people of Oklahoma. Retrieved from <http://www.hhs.gov/healthcare/facts/bystate/ok.html>

Department Health and Human Services, Centers for Medicare and Medicaid Services. (2014b). Improvements for women. Retrieved from <http://www.hhs.gov/healthcare/prevention/women/index.html>

Department Health and Human Services, Centers for Medicare and Medicaid Services. (2014c). Preventive care for children. Retrieved from <http://www.hhs.gov/healthcare/prevention/children/index.html>

United Health Care. (2014). America's health rankings: Oklahoma. Retrieved from <http://www.americashealthrankings.org/ok>

Department of Health and Human Services, Health Resource Services Administration. (2014). Health professional shortage areas, Oklahoma. Retrieved from <http://hpsafind.hrsa.gov/>

Budryk, Z. (2013, November 11). Hospital closures will leave 'medical deserts'. Retrieved from <http://www.fiercehealthcare.com/story/hospital-closures-will-leave-medical-deserts/2013-11-11>

Women and Oklahoma Health

Diana Hartley, Executive Director, Oklahoma Women's Coalition

Women and Oklahoma's Health

Why don't people get it? The facts are everywhere. It's hard to look at a newspaper or hear a story without learning the dismal statistics and poor health rankings almost on a daily basis. The health of Oklahomans is something everyone wants to talk about yet the words and actions aren't producing positive results. There's no shortness of websites full of tips and tricks, inviting fitness centers on almost every corner, diet programs with promises of amazing results, and tasty healthy eating options. Yet the health outcomes remain at or near the bottom across the country.

So why don't people get it?

Problems and their causes have lots of layers to work through. There has to be an understanding of the causes of poor health and leaders with the courage to address them. Not by blaming others or being victims, but by people owning their choices and taking charge personally. Oklahoma must create a new culture built on an effective statewide approach to improve the health of all citizens, with an emphasis on women and girls.

Why Focus on Women and Girls?

One of the reasons the Oklahoma Women's Coalition was formed in 2008 was to promote the health of women. These women are mothers, sisters, daughters, partners, neighbors and friends, and they all deserve better. They want to live in healthy environments. They want the knowledge and resources to make healthy choices. They want accessible, affordable and quality health care. With almost 1.9 million females living in Oklahoma – a little over half of the population – it will take a focus on women and girls to create more positive outcomes and have the desired impact on this state.

Most decisions – about 80 percent - concerning what a family will eat, how active they will be, and which doctors they'll visit are made by women. It makes sense to put them at the center of the

solutions resulting in better health outcomes. It makes sense to support expectant moms during and after their pregnancies. It makes sense to create more prevention programs to reach girls so health problems can be addressed before they ever begin. It makes sense to reduce the number of adverse childhood experiences. It makes sense to foster positive relationships and provide strong foundations for all women and girls.

Need for a Statewide Framework for Action?

It takes a leading organization like the Academy for State Goals to address because no one organization, government program or piece of legislation can solve the problem. It will require a strategic statewide approach to address learning, create behavioral change, and improve health outcomes. There is a role for the Oklahoma Women's Coalition, working in conjunction with the Academy and scores of other organizations, businesses and individuals to create some effective long term solutions.

What Are the Solutions?

One of the Coalition's focus areas is the improvement of women's and girl's health. Working together, there are three goals that can help move Oklahoma in the right direction toward improved health and outcomes:

- Build a healthier culture in Oklahoma
- Create greater access to affordable health care
- Expand mental health/substance abuse services

What Can Be Done? Call to Action

1 Build a healthier culture – Just telling people to take personal responsibility for their actions and their health isn't producing favorable results. They must be taught what it takes to be healthy, why it matters, and how they can take the steps necessary. For many adults, they've heard the messages but for whatever reasons they choose



to continue making poor choices. A focus on prevention and earlier intervention in young people's lives could have the desired impact on the state's outcomes.

Old school thinking that parents will take care of this and set good examples isn't happening – in part because of divorces and single parent households, poverty, and incarcerated parents. The traditional thoughts of family structure are deteriorating. Not every woman and girl has had a positive health role model or mentor to guide them. Imagine how the conversation and the culture of our state would change if every middle school girl had a strong female role model and mentor or a “family” of women to guide and support her.

This prevention effort would help surround a young girl with caring women to teach her healthy eating habits, fun ways to exercise, positive self-image, and how to avoid making poor choices that would negatively impact her health and well-being in the future.

There are a number of nonprofit agencies focusing on mentoring including Girl Scouts and Big Brothers & Big Sisters, but it just isn't enough. And the solution isn't to create more nonprofits in Oklahoma. The ones already focusing on this issue don't have enough staff or funding to fully meet the needs. With the Coalition, the Academy and others creating an increased emphasis on matching girls with strong female roles models, the conversation can change and so can the culture.

2 Create greater access to health care services - Women and girls need to be connected to health care services throughout their lives with an emphasis on prevention and health promotion. It is too costly on too many levels to merely react to health crisis. There has to be an expansion of access to services. It has to be affordable and avail-

able for the most vulnerable women and girls. So many diseases and illnesses are inadequately treated among the poor, creating a cycle of poor health.

Women who suffer from diabetes are 40 to 50 percent more likely to suffer heart disease than men. A big part of this is tied to body mass index or how a person's weight is considered in relation to their height. Oklahoma's obesity problems contribute to great health risks in many ways – this being another example. If women have access to care sooner and receive earlier diagnoses, they can improve their health status. Men and women can no longer be lumped together when it comes to treating chronic diseases and prevention. Gender differences make a difference and more aggressive screening, access to care and treatment can save lives and money.

3 Expand mental health and substance abuse services – It's impossible to discuss the physical health and well-being of women without addressing mental health. Unfortunately for Oklahoma the lack of mental health and substance abuse services is giving this state the distinction of incarcerating more women than any other state in the nation. About 85 percent of women incarcerated in this state for nonviolent crimes have mental health and addiction issues. Almost every single woman has a history of trauma and violence through child physical or sexual abuse, domestic violence or rape. Add to that a history of family dysfunction and instability including someone in the home with a drinking problem, drug problem and/or mental illness. Almost 90 percent of the female inmates in Oklahoma prisons in 2012 had a need for mental health treatment. The need is great. The services simply can't meet the demand.

Health outcomes in this state can improve. It will take a statewide framework with strategic approaches. It will take involving everyone, especially women who influence so many of the decisions related to health for themselves and their families. The powerful social network tools available create an even greater opportunity than ever to affect Oklahomans on a peer-to-peer level. Individuals working together can and will change the culture of Oklahoma – and change the health of Oklahoma.

Health and Rural Oklahoma

Jeff Hackler, JD, Chad Landgraf, MS and Denna Wheeler, PhD, Center for Rural Health, OSU, Tulsa

Introduction

We are accustomed to seeing Oklahoma consistently ranked near the bottom on leading health indicators. The United Health Foundation's 2013 Annual Health Rankings Report placed Oklahoma 44th in overall health. The ranking was driven partly by high obesity rates and physical inactivity. Oklahoma ranks 49th for senior health (adults ≥ 65 years old). This poor ranking was driven by insufficient medical screenings, high numbers of falls, hip fractures and poor nursing home care. As a state, we are doing a few things well especially related to clinical care. Preventable hospitalizations are decreasing and the rate of cardiovascular deaths is decreasing.

Although we are making limited gains in at least one behavioral measure (e.g., smoking was down 2.8% last year) and several clinical measures, our overall health ranking continues to trend downward.

Further, a recently published report (Remington et al., 2013) analyzing premature death rates as a measure of overall health outcomes reported that during the 2000s Oklahoma was one of only two states that reported an increase in premature death (0.18% per year). This has resulted in Oklahoma being ranked 50th for two consecutive decades as having the worst improvement in premature death.

Although Mississippi remains in first place with the highest premature death rate overall, Oklahoma is trending to overtake it before 2020.

This report examines the current health status of rural Oklahoma. We begin by reviewing general population characteristics and select socioeconomic conditions of rural Oklahoma. We also address health status, including selected behavioral factors and structural forces affecting health status. We conclude with policy recommendations formulated to improve the health status of rural Oklahoma.

Where is Rural Oklahoma?

No single definition of "rural" serves all policy purposes. To date, various federal health programs rely on more than 15 different taxonomies to delineate rural America. The Oklahoma State University Center for Rural Health (OSUCRH) uses an economic taxonomic system based on Rural-Urban Commuting Areas (RUCA) data developed by the Washington, Wyoming, Alaska, Montana, and Idaho (WWAMI) Rural Health Research Center (2014).

For each county in Oklahoma, the OSUCRH calculates the total percentage of the population living in each RUCA category. Counties with more than 50% of their population living in urban coded census tracts are classified as urban; counties with less than 50% of the population in urban coded tracts are classified as rural. Aggregating the census tract data to the county-level permits the analysis of health data and socioeconomic data, which are typically reported at the county-level.

Using the most recent RUCA data provided by WWAMI, the OSUCRH classifies 63 counties in Oklahoma as rural and 14 counties as urban (see Figure 1). To facilitate further analysis, the OSUCRH divided rural Oklahoma into four regions: Northeast, Northwest, Southeast, and Southwest Rural Oklahoma.

These regions are roughly divided into the quadrants created by Interstate-35 and Interstate-40 (see Figure 1). Studying rural Oklahoma using quadrants highlights important regional nuances that blanket references to "rural Oklahoma" often do not capture.

Figure 1. Rural and Urban Oklahoma, 2014 **Human Landscape of Rural Oklahoma**

The counties that comprise rural Oklahoma are home to a population of 1,514,977 or 40% of the state total (US Census, 2010). The rural population in Oklahoma has been steadily declining since the



middle of the last century. Most of the population growth in Oklahoma is concentrated around the state’s metro areas and expanding suburban communities (Monies, 2011). Table 1 provides a basic racial/ethnic profile of rural Oklahoma.

Table 1. Demographic Comparison of Rural and Urban Oklahoma

Education attainment among rural Oklahomans trails that of their counterparts living in urban areas. An estimated 16% of rural Oklahomans over the age of 25 do not have a high school diploma or equivalent. The rate in urban Oklahoma is estimated at 12%. At the other end of the education spectrum, an estimated 18% of rural Oklahomans over the age of 25 have a Bachelor’s degree or

	All	Rural				Urban	Oklahoma
		NE	NW	SE	SW		
White	75%	71%	85%	72%	81%	73%	74%
American Indian	10%	13%	2%	11%	8%	5%	7%
Black	3%	4%	2%	3%	4%	10%	7%
All Other Races	12%	13%	11%	14%	8%	12%	12%
Hispanic (Any Race)	7%	4%	14%	5%	8%	10%	9%

Source: US Census Bureau (2013). Note: Totals may not equal 100% due to rounding.

higher while the urban rate is estimated at 27%. The lower educational attainment directly translates to high levels of poverty (see Table 2) that chronically plague rural Oklahoma (Wertz, 2012).

Table 2. Select Socioeconomic Measures of Rural and Urban Oklahoma

Health Landscape

The health landscape of rural Oklahoma is bleak. Couple the poor socioeconomic forces outlined above with individual behavioral factors that eschew a culture of health and you have a recipe for a public health crisis (see Table 3). From

	All	Rural				Urban	Oklahoma
		NE	NW	SE	SW		
% Population ≤ 18 Years Old	24%	24%	25%	24%	25%	25%	25%
% Population ≥ 65 Years Old	16%	15%	16%	17%	15%	12%	14%
% Population Living in Poverty	19%	20%	13%	21%	17%	15%	17%
% Adult Population w/o High School Diploma or Equivalent	16%	15%	16%	19%	16%	12%	14%
% Adult Population with Bachelor’s Degree or higher	18%	19%	20%	16%	17%	27%	23%
% Households Receiving Social Security Income	35%	34%	32%	38%	34%	27%	30%

Source: US Census Bureau (2013)

2010 to 2012, the age-adjusted death rate in rural Oklahoma was 955.1 deaths per 100,000 population while the death rate of urban Oklahoma was 865.7 deaths per 100,000 (OSDH, 2014a).

Table 3. Select Health Status Measures of Rural and Urban Oklahoma

In addition to poor health behaviors, there are structural forces that often impede the development of a healthy populace. Foremost is the dearth of primary healthcare providers. Oklahoma consistently ranks low compared to other states in the ratio of primary care physicians to population. The situation is dire in rural Oklahoma where there are roughly 40% fewer primary care physicians compared to urban Oklahoma (see Table 3) and the physician workforce is aging (OSUCRH,

	All	Rural				Urban	Oklahoma
		NE	NW	SE	SW		
% of Adult Population (Age 18-64) without Health Insurance	28%	28%	26%	30%	26%	25%	26%
% of Population Enrolled in SoonerCare	31%	31%	25%	35%	30%	25%	27%
Age-Adjusted Death Rate (per 100,000 Population)	955	943	859	980	991	866	905
Premature Death (YPLL lost before age 65 per 100,000 pop.)	5,298	4,988	4,878	5,632	5,590	4,590	4,883
% of Adults Who Smoke	27%	28%	24%	28%	26%	24%	25%
% of Adults Who Are Obese	30%	30%	31%	30%	30%	28%	29%
Primary Care Physicians (per 100,000 Population)	67.7	74.4	71.3	65.2	59.6	119.6	95.9

Source: Health insurance information from US Census Bureau (2014); SoonerCare enrolled data provided by OHEA (2013); Death rate and premature death information from OSDH (2014a); Smoking and obesity information from OSDH (2014b); Primary care physicians information provided by OSUCRH (2014). Note: YPLL = Years of Productive Life Lost

2008). The lack of health insurance coverage and the travel distance to the nearest hospital in rural Oklahoma are additional barriers to a healthy populace.

Conclusions/Recommendations

Health is a function of genetics, behaviors, the environment, social policies, and clinical care. Much of the recent debate over health care reform has focused on expanding access to care and developing alternative pay models. It seems to make intuitive sense that the greatest impact on the rising cost of health care and declining health status of Americans is access to high quality clinical care, yet clinical care may have less of an impact on health than we think.

Recently published, physician-led, health disparities research seems to downplay the role of clinical care in changing the course of poor health outcomes associated with increasing rates of chronic disease. Steven Schroeder, a physician and professor of medicine at the University of California stated “. . . the pathways to better health do not generally depend on better health care” (2007, p.1221). Similarly, Egede and Bosworth (2008) stated that patient level factors “typically account for 95–98% of the variance in health outcomes, while provider and health systems factors typically account for <10% of the variance in outcomes” (p. 706).

These researchers and others note that improving population health requires a focus on the social determinants of health that drive health behaviors. Health behavior is the greatest influence on the chronic disease epidemic that accounts for nearly 40% of all premature death in the U.S. (McGinnis et al., 2002).

Recent research by Wheeler (2014) suggests that we may be able to affect greater change in Oklahoma’s health status by focusing more attention on social, educational and public health policy. Poverty and poor health are inextricably linked through complex associations with education, employment opportunities, and access to health care.

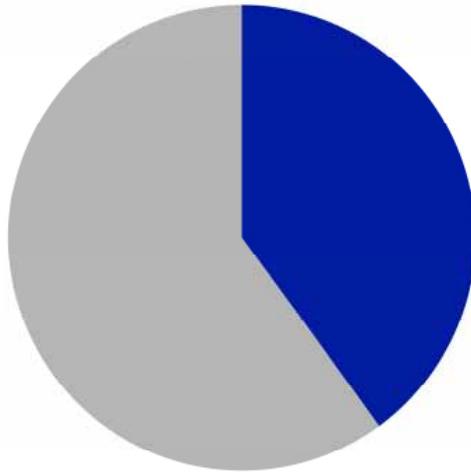
Individuals living in persistent high poverty counties are more likely to report poor health

status. Access to care is a significant concern and we must continue to develop programs designed to increase the health care work force in rural areas and strengthen rural hospitals. Simultaneously, we must address the issues associated with persistent poverty such as low high school graduation rates and low college attendance rates in order to improve health outcomes that stem from unhealthy behaviors and poor economic and environmental conditions.

References

- Americas Health Rankings (2014, March 7). Retrieved from <http://www.americashealthrankings.org/OK>
- Egede, L. E., & Bosworth, H. (2008). The future of health disparities research: 2008 and beyond. *Journal of General Internal Medicine*, 706-708.
- McGinnis, J. M., Williams-Russo, P., & Knickman, J. R. (2002). The case for more active policy attention to health promotion. *Disparities & Policy*, 21, 78-93.
- Monies, P. (2011, February 16). Oklahoma census: Population growth, declines will have political ramifications. NewsOK. Retrieved from <http://newsok.com/oklahoma-census-population-growth-declines-will-have-political-ramifications/article/3541212>
- Oklahoma Health Care Authority (OHCA) (2013). 2013 Annual Report. Retrieved from <http://www.ohca.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=15431&libID=14414>
- Oklahoma Health Improvement Plan (OHIP) (2014). 2013 Oklahoma Healthcare Workforce Data Book. Retrieved from <http://www.healthsciences.okstate.edu/ruralhealth/documents/OHIPWorkforceDataBook.pdf>
- Oklahoma State Department of Health (OSDH) (2014a). Center for Health Statistics, Health Care Information, Vital Statistics 2010 to 2012, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from <http://www.health.ok.gov/ok2share>
- Oklahoma State Department of Health (OSDH) (2014b). Center for Health Statistics, Health Care Information, Behavioral Risk Factor Surveillance System 2005 to 2010, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from <http://www.health.ok.gov/ok2share>
- Oklahoma State University Center for Rural Health (OSUCRH) (2008). State of the State’s Rural Health: Physicians and Hospitals. Retrieved from <http://www.healthsciences.okstate.edu/ruralhealth/docs/SOSRH-2008Edition.pdf>
- Oklahoma State University Center for Rural Health (OSUCRH) (2007). State of the State’s Rural Health: A Snapshot of Current Conditions. Retrieved from <http://www.healthsciences.okstate.edu/ruralhealth/docs/SequentialAnnualReport.pdf>
- Remington, P.L., Catlin, B.B., Kindig, D.A. (2013). Monitoring progress in population health: Trends in premature death rates. *Preventing Chronic Disease*, 1-8.
- Schroeder, S. A. (2007). We can do better - Improving the health of the American people. *The New England Journal of Medicine*, 1221-1228.
- Trust for America’s Health (2012). F as in Fat: How Obesity Threatens America’s Future. Trust for America’s Health. Retrieved from <http://www.fasinfat.org/files/fasinfat2013.pdf>
- US Census (2010). 2010 Census. Retrieved from <http://factfinder2.census.gov>
- US Census (2013a). 2008-2012 American Community Survey. Retrieved from <http://factfinder2.census.gov>
- US Census (2014). Small Area Health Insurance Estimates. Retrieved from <http://www.census.gov/did/www/sahie/index.html>
- Wertz, J. (2012). Despite State’s Low Unemployment, Poverty and Hunger High in Rural Oklahoma. State Impact. Retrieved from <http://stateimpact.npr.org/oklahoma/2012/05/10/poverty-and-hunger-are-high-in-rural-oklahoma/>
- Wheeler, D. (2014). What’s Preventing Oklahoma from Improving Health Indicators? *Oklahoma D.O.*, 78(10): 38-40.
- WWAMI. (2014). Rural Urban Commuting Area Codes, RUCA. Retrieved from <http://depts.washington.edu/uwruca/index.php>

Section 10
BEHAVIOR PATTERNS



Our Oklahoma Turning Point Survey

Craig Knutson, Chief of Staff, Oklahoma City University

The recently released 2014 State of the State's Health provides the reader a very detailed look at the current and overall health conditions/status in Oklahoma. It also provides local officials and policy makers with county by county snapshots of local strengths and weaknesses.

We have included a written and tabular summary of our statewide status in this document and have provided a link to the entire report, which includes health details on mortality and risk factors/behaviors for all 77 counties, in our e-library.

Our Theme

To stay with the theme of this document – what's the problem/ what's the solution – it is essential to acknowledge that Oklahoma has been blessed with having one of the nation's strongest Turning Point initiatives in the country.

Turning Point

Originally funded by the Robert Wood Johnson and W.K. Kellogg Foundations, Oklahoma Turning Point, housed at the State Department of Health and active since the late 1990s, was founded to "help transform public health in Oklahoma by working directly with community partnerships on health improvement initiatives." The strategy employed by the 72 Turning Point Councils across the state is to identify "community priorities and implement local solutions."

Our Customized 77 County Survey

Our Town Hall planning team sought to take advantage of both the depth and breadth of these

local efforts by surveying the local councils, seeking their input in three important areas: their top three local health-related issues; local strategies being used to address those issues; and, of those strategies, which have been the most effective in reversing their local health issues.

Survey Results

The detailed results of that statewide survey are included later in this document, but it is important to note here that, due to the outstanding leadership of the Oklahoma Turning Point Council, we

received a 100% response rate, a rate we never expected to achieve.

The energy level and seriousness with which the OTPC approach this request, combined with the willingness of the "foot soldiers in each county or regional collaborative, provides

us/you with some very rich and powerful data to base our public policy recommendations around.

RESULTS

The Academy was most fortunate to receive a 100% response rate to our on-line survey. We decided to take the data and disaggregate it into four geographic quadrants of the state to see if there were any regional differentials in terms of critical health issues being faced/addressed.

The following table summarizes, by region, the top health issues the various councils currently face.

Clearly, Tobacco Use and the prevalence of Obesity dominate all four regional responses. In fact, all responses aggregated together found that Tobacco



ISSUE	NE	NW	SW	SE	TOT
Obesity	13	6	7	16	42
Tobacco	8	7	12	17	44
Substance Abuse	6	4	8	12	30
Lifestyle	5	-	9	15	29
Access to Care	6	3	5	-	14
Children's Health	-	6	-	6	12
Heart Disease	7	-	-	3	10
Diabetes	5	-	-	4	9
Mental Health	-	5	-	-	5
Other	11	8	4	2	24
Total	61	39	45	75	220



and Obesity tallied 44 responses each, with Substance Abuse (drug/alcohol) and the prevalence of Mental Health maladies rivaling each other for a distant third place.

So, based upon all the research found in both national and state reports and presented in this document or in our e-library, our survey reports mirror those findings quite well.

Based upon the more detailed responses, “Tobacco” included both inhaled and chewing products; “Obesity” included both lack of physical exercise (calorie eaters) and poor nutritional consumption (calorie producers).

We might add that there were a number of very significant issues at the local level that, quite likely, are also faced by other regions. For example, in Adair County, “Access To Care” is so critical that it was used for all three responses. It is well known that Oklahoma ranks near the bottom in the number of primary care physicians per capita; where that is most prevalent is in our rural counties, like Adair County.

Other issues mentioned were the ill effects of: teen pregnancy, infant mortality, underage drinking, suicide, and the lack of school nurses. ALL are legitimate concerns like faced by many if not most of the councils.

What should be most useful to all those concerned with finding and funding solutions to these problems is WHAT (strategies) the regional councils are doing to reduce or eliminate those maladies. The last two questions of the survey asked that question, and then which of those strategies were most effective.

While we recognize the responses, in most cases, are more anecdotal than empirical, the power of daily and on-site observations should not be discounted.

The Town Hall seeks to generate recommendations for improvement. We have categorized the following strategies as either a public policy response or a community-based response:

PUBLIC POLICY

- State-Level Health Policy Changes
- OK Tobacco Hotline
- TSET
- Affordable and Available Healthy Food
- Healthier food options under the WIC program

COMMUNITY BASED

- Exercise and walking trails
- Collaborations and Partnerships
- Community-based fundraising
- County Health Improvement Organizations
- Engaging youth in program development/ participation
- Garden Clubs and Farmer’s Markets

OKLAHOMA TURNING POINT PARTNERS

Local Turning Point partnerships focus on community health improvement initiatives such as tobacco use prevention, obesity reduction and child health.

Adair County Turning Point

Atoka/Coal Partnership for Change

Partners In Progress
Beaver County

Oklahoma Unified Resources (OUR) Turning Point
Buckham/Rogers Mills County

Blaine County Community Health Action Team
(BCHAT)

Bryan County Turning Point Coalition

Caddo County Interagency Coalition (CCIC)

Caddo County Coalition for Children
and Families

Mustang Prevention and Coalition Team (MPACT)
Canadian County

Center County Turning Point Coalition

Cherokee County Community Health Coalition

Choctaw County Coalition

Bellevue (in Bowel) Coalition
Choctaw County

Cleveland County Turning Point

Atoka/Coal Partnership for Change
Coal County

Fit Kids of Southwest Oklahoma
Comanche County

Lawton Ft. Sill Community Coalition
Comanche County

Craig County Community Partnership

Creek County Community Partnership

Community Health Improvement Project (C.H.I.P.)
Creek County

Custer Health Action Team (CHAT)
Custer County

Delaware County Community Partnership

Garfield County Coalition Health Planning
Committee

Garvin County Health Coalition

Interagency & Community Coalition (ICC)
Grady County

Red River Tobacco Education Consortium
Greer/Hemphill/Tillman Counties

Harper County Turning Point

Hooker County Coalition

Hughes County Turning Point Coalition

Jackson County Community Health Action Team
(JCHAT)

Tishomingo Development Team
Johnston County

Key County Early Childhood Planning Council

Kingfisher Community Collaborative (KCC) –
Kingfisher County

Kiowa County Community Coalition

Living In Latimer County Coalition

Health In the Valley – A Turning Point Partnership
Latimer/LeFlore/Pushmataha Counties

LeFlore County Coalition for Healthy Living

Logan Turning Point Coalition

Logan County Partnership

Love County Community Coalition

Major County Coalition

Marshall County Partners In Progress

Mayes County Hope Coalition

Blanchard Community Coalition (BCC-TP) –
A Turning Point Partner
McCain County

C.A.R.E. Coalition (Community Alliance of
Resources for Everyone)
McCain County

McDurtain County Coalition for Change

McIntosh County Community Health Coalition

Muskogee Turning Point

Ottawa County Community Partnership Board –
OCCP/Turning Point

Central Oklahoma Turning Point
Oklahoma County

Wellness Now
Oklahoma County

Ottawa County Wellness Coalition

Ozage County Community Partnership Board

Ottawa County Health Coalition

Payne County Breathe Easy Coalition

Local Service Coalition
Pittsburg County

SE Tobacco-Free OK Coalition
Pittsburg County

Pontotoc County Turning Point/SOC

Pottawatomie County – PATCH Coalition

Pushmataha County Turning Point Coalition

Health in the Valley – A Turning Point Partnership
Pushmataha/LeFlore/Leflore Counties

Healthy Community Partnership
Rogers County

Seminole County Community Alliance

Sequoyah Wellness Partnership
Sequoyah County

Pathways to a Healthy Stephens County

Texas County Coalition

Tillman County Youth & Family Community Coalition

Red River Tobacco Education Consortium
Tillman/Granger/Harmon Counties

Family Health Coalition
Tulsa County

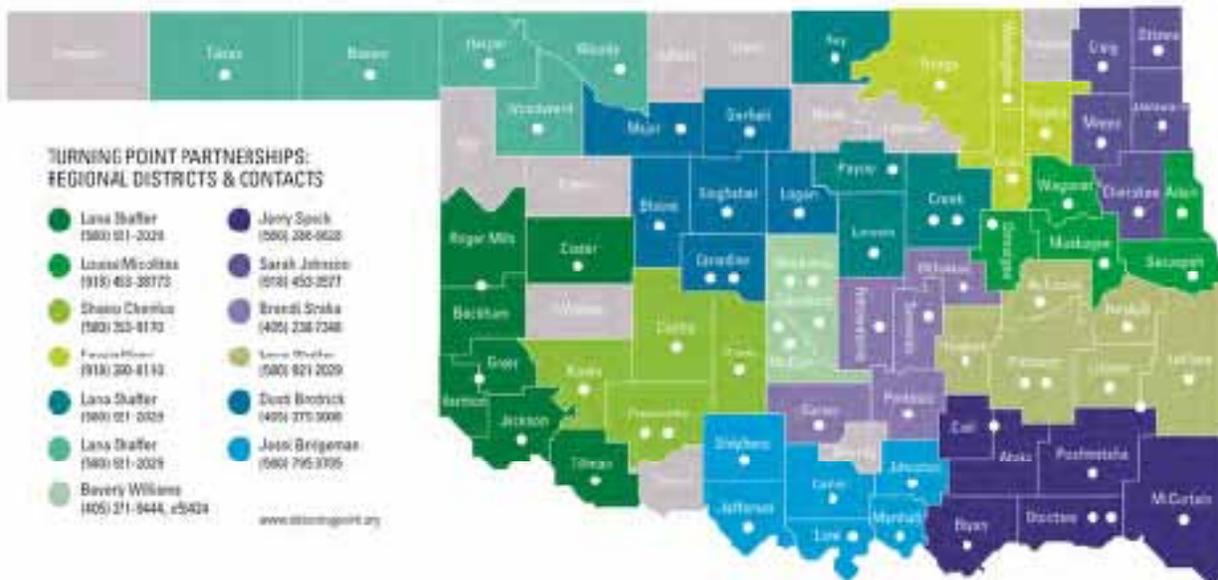
Wagoner Family Service Council
Wagoner County

Washington County Wellness Initiative

Woods County Coalition

Woodward Area Coalition
Woodward County

For copies of Community Partner annual reports, contact information, meeting agendas and more, please visit www.ok.gov/healthy/Community_Healthy_Community_Development_Service/Turning_Point



Oklahoma's Meal: If Food is a Problem ...

Mike Lapolla, Academy Research Design and Production Committee



"Gonna bring you barley, carrots and potatoes, pasture for the cattle, spinach and tomatoes" lyrics from "Oklahoma"

The Oklahoma Meal was designated by the Legislature (HCR 1083) in 1988. It features all of the comfort foods you would expect like chicken fried steak, biscuits, gravies etc. It's too bad that the "barley, tomatoes, carrots or spinach" of our uplifting state song are not included in our odd "Oklahoma Meal". This can, and should be, fixed.

One of the two leading causes of premature death in Oklahoma is heart disease. A significant contributing factor to heart disease is diet. Prior to 1988 our heart disease rates were close to the national average. Since 1988, heart disease in Oklahoma dramatically and significantly worsened compared to other states.

Today our rates are almost 20% worse than the national average. Is this simply a coincidence?

Maybe and maybe not. You be the judge. Regardless, the optics and implied messages simply no longer serve us well.

By today's standards, the Oklahoma Meal is contrary to good heart health. Attempts to repeal and replace that resolution have been passively rejected. No legislator has cared enough - yet.

Let's Repeal and Replace The Meal. Let's take the same or similar foodstuffs, and repackage them as the Oklahoma Meal for the 21st Century. Smart Oklahomans can do that. The message would be very loud, very positive, and very inexpensive.

The message is that Oklahoma will no longer tolerate the statewide cognitive dissonance concerning the prevalence of heart disease and the promotion/preparation of the traditional foodstuffs that comprise the Oklahoma Meal.

If we can't do that - what can or will we do?



"My Oklahoma History Classes had a party eating the food on Oklahoma's State Meal. Here is a plate of food from 7th Hour! Black Eyed Peas, Grits, Pecan Pie, Fried Chicken, Corn Bread, and Barbecue Pork." http://mshaugheysclass.blogspot.com/2012/09/oklahoma-state-meal_20.html (9.20.12)



"This could be the state meal of Oklahoma. The steak was fine, with thick crunchy breading crispy enough to stand up to the rich white gravy. I asked for brown gravy on the potatoes; that was a good choice. ... Just look at that gravy!" <http://tulsafood.com/tulsa-fried-food/nelsons-ranch-house/> (5.27.10)

MINIMAL FRUIT CONSUMPTION (<1/DAY)

	PERCENT	
	2011	GRADE
STATE COMPARISON		
US	37.7	C
NEW HAMPSHIRE (best)	38.3	B
OKLAHOMA	48.2	F
MISSISSIPPI (worst)	58.8	F
AGE IN YEARS		
18 - 24	51.5	F
25 - 34	52.8	F
35 - 44	57.4	F
45 - 54	52.8	F
55 - 64	48.8	F
65+	38.3	C
SEX		
MALE	46.3	F
FEMALE	48.5	F
RACE/ETHNICITY		
WHITE (NH)	48.8	F
BLACK (NH)	48.3	F
AMER INDIAN (NH)	55.1	F
HISPANIC	48.1	F
INCOME		
< \$20K	57.7	F
\$25K - 29K	52.8	F
\$30K - 49K	51.8	F
\$50K - 74K	45.7	F
\$75+	46.4	F
EDUCATION		
< HS	55.8	F
HS	50.7	F
HS+	48.1	F
COLLEGE GRADUATE	48.4	D
REGION		
CENTRAL	48.3	F
NE	51.8	F
NW	47.2	F
SE	53.8	F
SW	55.8	F
TULSA	45.8	D

MINIMAL VEGETABLE CONSUMPTION (<1/DAY)

	PERCENT	
	2011	GRADE
STATE COMPARISON		
US	22.8	C
WASHINGTON (best)	15.3	A
OKLAHOMA	28.8	D
DC (worst)	32.5	F
AGE IN YEARS		
18 - 24	34.1	F
25 - 34	28.4	F
35 - 44	25.9	D
45 - 54	23.7	C
55 - 64	27.2	D
65+	23.4	C
SEX		
MALE	38.1	F
FEMALE	23.8	C
RACE/ETHNICITY		
WHITE (NH)	25.3	D
BLACK (NH)	43.8	F
AMER INDIAN (NH)	29.4	F
HISPANIC	27.7	D
INCOME		
< \$20K	37.5	F
\$25K - 29K	31.8	F
\$30K - 49K	26.7	D
\$50K - 74K	21.1	C
\$75+	19.2	B
EDUCATION		
< HS	33.5	F
HS	31.2	F
HS+	26.7	D
COLLEGE GRADUATE	17.8	B
REGION		
CENTRAL	25.1	D
NE	28.8	D
NW	26.8	D
SE	31.7	F
SW	38.1	F
TULSA	26.4	D

Diabetes Sucks!

Craig Knutson, Academy Research Design and Production Committee

OKLAHOMA'S SILENT KILLER

How may we best improve the overall length and quality of life in Oklahoma? We should take public and personal health actions to significantly reduce the prevalence of diabetes. The 2013 United Health Foundation health rankings pegged Oklahoma 43rd in the prevalence of diabetes and 45th in the prevalence of obesity. One of their summary “challenges” for Oklahoma was a “high prevalence of sedentary lifestyle, obesity and diabetes. More than 22 million Americans have diabetes. Native American tribes are disproportionately afflicted. And another 80 million people are “prediabetic.” The numbers are rising, not declining.

The contributions of diabetes to heart disease, stroke, high blood pressure, blindness, kidney disease, nervous system disorders and amputations are well researched and highly correlated. Oklahoma has programs and efforts targeted at addressing this very serious problem.

Knowing more about the disease and having access to early detection and prevention activities/services needs to be expanded and better marketed.

I would recommend that the Governor and Secretary of Health, in collaboration with our tribal governments, convene a working statewide conference to help develop an Oklahoma anti-diabetes strategy.

Two additional recommendations I would suggest: (1) set a statewide goal to reduce the incidence of diabetes from 11.5% to below 10% over the next five years and (2) investigate the replication of the Mississippi Diabetes Telehealth Network in order to connect with our rural areas.



DIABETES DEATHS

INDICATOR

2000 2005 2009 2013 2014 2015 PROGRESS

2000 2005 2009 2013 2014 2015 PROGRESS

	2007	2014	2015	GRADE
STATE COMPARISON				
US	22.5	24.8		C
MASSACHUSETTS (best)	19.1	19.8		A
OKLAHOMA	29.4	24.8		D
DC (worst)	36.5	32.8		F
AGE IN YEARS				
18-24	=	=	=	
25-34	1.8	3.7	1.3	A
35-44	6.2	4.3	3.5	A
45-54	17.0	19.4	14.8	A
55-64	51.4	43.2	33.1	F
65+	106.1	104.8	111.7	F
GENDER				
MALE	34.1	36.8	23.5	D
FEMALE	24.8	23.1	17.3	A
RACE/ETHNICITY				
WHITE (79%)	26.8	23.8	18.4	A
BLACK (9%)	66.8	66.8	32.1	F
AMER INDIAN (7%)	66.4	62.2	36.7	F
HISPANIC	27.8	28.8	21.8	C
INCOME				
< \$20k	NA	NA	NA	
\$25 - 29k	NA	NA	NA	
\$30k - 49k	NA	NA	NA	
\$50 - 74k	NA	NA	NA	
\$75+	NA	NA	NA	
EDUCATION				
< HS	NA	NA	NA	
HS	NA	NA	NA	
HS+	NA	NA	NA	
COLLEGE GRADUATE	NA	NA	NA	
REGION				
CENTRAL	23.8	24.7	18.5	A
NE	31.4	24.7	21.5	C
SW	29.1	28.8	21.1	C
SE	36.4	32.8	22.8	C
W	36.8	36.2	27.8	F
TOTAL	29.4	24.8	18.8	A

DIABETES PREVALENCE

INDICATOR

2000 2005 2009 2013 2014 2015 PROGRESS

2000 2005 2009 2013 2014 2015 PROGRESS

	2011	2012	GRADE
STATE COMPARISON			
US	8.8	9.7	C
ALABAMA (best)	7.4	7.0	A
OKLAHOMA	11.3	11.5	D
WEST VIRGINIA (worst)	12.5	13.8	F
AGE IN YEARS			
18-24	1.3	0.3	A
25-34	3.7	2.7	A
35-44	7.8	6.5	A
45-54	16.4	11.8	D
55-64	28.2	19.9	F
65+	21.8	23.5	F
GENDER			
MALE	12.1	12.3	F
FEMALE	18.2	18.8	D
RACE/ETHNICITY			
WHITE (79%)	10.3	11.8	D
BLACK (9%)	13.6	12.3	F
AMER INDIAN (7%)	16.4	18.4	F
HISPANIC	10.5	7.8	B
INCOME			
< \$20k	16.8	17.7	F
\$25 - 29k	13.8	14.2	F
\$30k - 49k	12.1	12.8	D
\$50 - 74k	8.5	8.8	C
\$75+	7.4	7.5	B
EDUCATION			
< HS	14.8	15.8	F
HS	11.5	12.2	F
HS+	10.8	10.3	C
COLLEGE GRADUATE	6.4	6.7	C
REGION			
CENTRAL	10.8	10.8	C
NE	12.8	13.3	F
SW	11.4	12.8	D
SE	12.8	14.4	F
W	12.8	11.8	D
TOTAL	8.8	10.8	C

The 10th Ranked State Coincidence?

Robert De Vogli, MPH, PhD, University of California, Davis

This article originally appeared February 13, 2014 in Mark News under the title of *Obesity as a Market Failure*”.

Roberto De Vogli is an Associate Professor in the Department of Public Health Sciences at the University of California, Davis. Dr. De Vogli’s research interests include: *Globalization, Inequalities, Psychosocial Factors and Health, Socioeconomic Status, Psychosocial Factors and Chronic Diseases and Social Determinants of Health and Health Behaviors.*

He led a study published by the World Health Organization (WHO) that explores the relationship between obesity and market deregulation.

It is retitled “The 10% Coincidence?” for use at the 2014 Oklahoma Academy Town Hall”.

The obesity epidemic is out of control. Since 1980, obesity rates have tripled in most countries, and there are now almost two billion overweight individuals in the world. Policy recipes to fix the problem abound. More education, fewer cars. More bicycles, less TV. The list goes on and on. So far, though, public-health interventions have failed spectacularly. But why?

Although the rise of obesity is often described as an effect of specific individual and lifestyle choices, the problem is largely a byproduct of deeper political and economic changes in society.

In a recent study published in the Bulletin of the World Health Organization, a group of researchers, led by myself, found that, when compared with more protected economies, countries adopting more aggressive deregulation policies experienced faster increases in body mass index and consumption of fast food and soft drinks. After taking into account alternative explanations and competing risk factors, we concluded unequivocally that the freer an economy is, the fatter its people are.

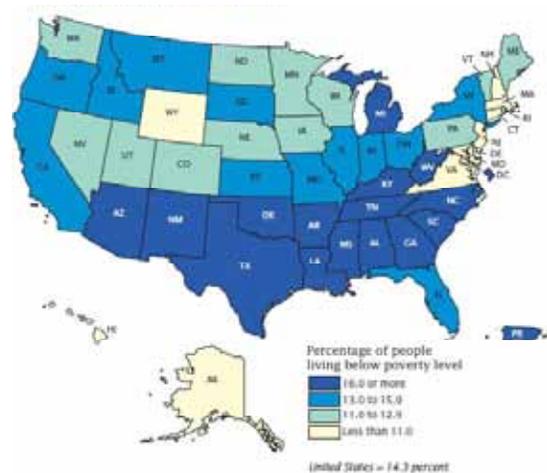
How does an unregulated market relate to the rise of obesity? Through market concentration and the rise of food oligopolies that flood markets with cheap, unhealthy, ultra-processed products, in addition to fast food and soft drinks.

It may seem paradoxical, but unfettered market competition tends to naturally degenerate into market oligopolies. This happens because, in a market without rules, the winners of a competition find it more profitable and rational to suppress the very competition that made them win. This often translates into a gradual decline of smaller economic actors, which are pushed out of business or “swallowed up” through mergers and acquisitions, or what can be called “corporate cannibalism.”

This is more or less what happened in the food and agricultural sectors beginning in the 1980s, at the beginning of the so-called “deregulation revolution.” It is exactly during this period that worldwide dietary patterns dramatically changed toward ultra-processed products.

The rise and consolidation of food chains, and the decline of local food systems and small farms, was first felt in the very country that led the

**POVERTY RATES
OKLAHOMA IS RANKED 10TH**



“deregulation crusade”: the United States. But as the old saying goes, “When the United States sneezes, the world catches a cold.” Deregulation went global and ultra-processed products crossed national borders one after another.

As food systems became increasingly dominated by ultra-processed products, fast food, and soft drinks, food oligopolies made enormous profits and acquired the power to set prices at will and determine the terms and conditions of their market sectors. Large food corporations became very active politically, and lobbied against regulations designed to safeguard public health and protect small farms.

“Foodopolies” have also aggressively invested in food advertisements shaping preferences and tastes, especially of young customers. It has been estimated that 96 percent of American schoolchildren can identify Ronald McDonald, and that the only fictional character with more recognition is Santa Claus.

So, what needs to be done to stop obesity?

A good way to start would be to introduce an “ultra-processed food tax” on unhealthy products such as fast food, snacks, and soft drinks. Corporate libertarians may consider taxation an unfair intrusion in market affairs, but even Adam Smith supported a sugar tax. In “The Wealth

of Nations” (1776), he wrote, “Sugar, rum, and tobacco, are commodities which are nowhere necessities of life, which are become objects of almost universal consumption, and which are, therefore, extremely proper subjects of taxation.”

Revenues from an ultra-processed food tax could be used to subsidize fruits and vegetables and small farms growing fresh and healthy products. According to our study, Switzerland has experienced the slowest increases in body mass index and fast-food consumption per capita. It is no coincidence that most Swiss farmers are small producers, and that almost 60% of their income comes from government subsidies.

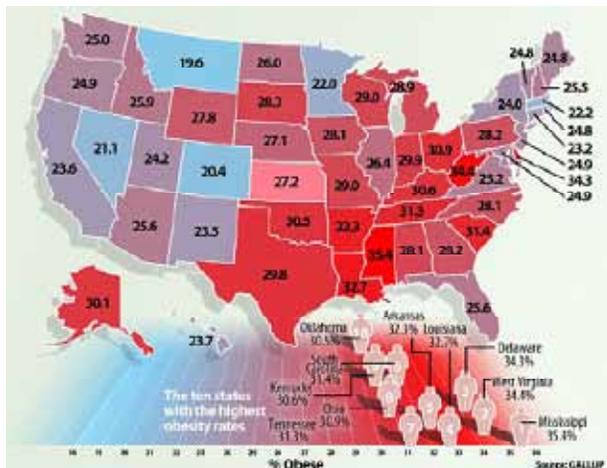
We also need reforms to discourage large-scale industrial agriculture that uses excessive amounts of fertilizers, pesticides, chemicals, growth hormones, and antibiotics, and it is crucial that we enact tighter regulations on packaging and labeling of food items and advertising of unhealthy products, especially for children. But perhaps the most important reform is the adoption of anti-trust laws to reduce market concentration in the food and agricultural sectors.

Of course, all these regulations can hardly occur without deeper, more systematic changes in the political economy. Since the beginning of the “deregulation revolution,” global and national economic policies have been increasingly affected by the ideology of the “self-correcting market.” But as the 2008 economic crisis showed, this ideology is awfully inadequate.

As American economist Arthur Okun once observed, “the market needs a place, but the market needs to be kept in its place.” Governments need to take steps to regulate the market system’s built-in tendency toward consolidation and externalities.

Obesity is an example of market failure. As long as the food and agricultural sectors continue to be dominated by the ideology of “small government and big business,” our chances of winning the obesity war remain slim.

**OBESITY RATES
OKLAHOMA IS RANKED 10TH**



OSU Incorporates the National Prevention Strategy

Suzy Harrington, DNP, RN, MCHES, Oklahoma State University, Stillwater

Our health care system is known as one of the most expensive, and is not known for having the best outcomes. It has been a system focused on providing medical or surgical care of a sick patient. This focus is evolving from medical care to health care; from patient care to individual or population prevention. Embedded within this is a stronger multi focal focus on behavioral prevention.

In the past, the primary causes of death were acute communicable diseases such as plagues and smallpox, or the result of poor sanitary conditions and unsafe working conditions. As society has evolved and health care and working conditions have improved, the primary causes of death are chronic and not communicable, mostly caused by poor behaviors rather than a bacteria or disease. The energy in/energy out imbalance is causing a rise in obesity, heart disease, diabetes, and even stress. And, although rates have decreased, tobacco use is still prevalent and is the number one cause of preventable death.

You may be familiar with the CDC history of state obesity prevalence (<http://www.cdc.gov/obesity/data/adult.html>) showing the rapid increase of obesity in our country, and Oklahoma is consistently one of the darker states with the highest BMI. This is a complex issue and not simply about going on a diet or exercising more. While ultimately behavioral choices are one's personal responsibility, this is a much broader cultural issue. The isolationist individual approach isn't working.

Oklahoma State University recognized this truth years ago and is actively committed to the wellness of its students, employees, communities and our

state – focusing on a holistic culture of wellness. We have worked hard to become America's healthiest campus and have achieved that status.

OSU has been in the forefront of university health and wellness, having the first stand-alone wellness center and as one of the first two university systems to be tobacco free. It is one of just a few universities that offers free employee fitness memberships, the first to develop personal nutrition trainers to work alongside personal fitness trainers, the originator of the certified healthy departments program, the first comprehensive pet therapy program, and home to one of the largest intramural programs. OSU is also the first to demonstrate such strong leadership commitment to the wellness effort by hiring the first dedicated Chief Wellness Officer in the country.



The role of Chief Wellness Officer is to provide expert executive health advice and coordination for the OSU system, in other words, to strategically coordinate all things wellness, providing a true culture of wellness – for OSU students, faculty and staff employees, and

the communities where the students and employees live, learn, work and play. OSU is the only university that is currently aligning these different audiences to achieve overarching health and well-being outcomes for both the campus and broader community.

To support this culture, embedded within the OSU Wellness framework is the university land- grant mission, the student pillars of excellence, and important national evidence based frameworks and benchmarks such as the National Prevention Strategy (NPS), Healthy People 2020, and Healthy Campus 2020.

The National Prevention Strategy “supports a comprehensive federal approach to preventing

sickness and disease by promoting health and wellness” focusing on seven topics to reduce the leading causes of preventable death and major illness: tobacco free living; preventing drug abuse and excessive alcohol use; healthy eating; active living; injury and violence free living; reproductive and sexual health; and mental and emotional well-being.

Healthy People 2020, a series of national science-based multi-agency objectives, goals and benchmarks focuses on twenty-six leading health indicators organized under a dozen high priority indicator topics: access to health services; clinical preventive services; environmental quality; injury and violence; maternal, infant and child health; mental health; nutrition, physical activity, and obesity; oral health; reproductive and sexual health; social determinants; substance abuse; and tobacco.

The first step for a culture change is to establish a consistent definition. What is wellness? Typically, the terms “diet” and “exercise” come to mind. These are things we do, rather than how we live. They are “chores” that are started and stopped. Wellness is broader. While an active lifestyle and healthy eating are important, so is adequate rest and hydration, tobacco cessation, social engagement, a sense of peace and resilience, energy and purpose in life, the management of stress to include financial readiness, and the pursuit of life-long learning. It includes preventive and clinical care, and safety, such as wearing seatbelts and no distracted driving either via texting or after drinking alcohol. Wellness is about who we are, our lifestyle. It is about a lifestyle full of choices and moderation. It is a harmony in our personal and professional lives and most importantly, is about fun and joy.

Wellness is different from person to person, and might differ from day to day. It is the harmony and synergy of our physical, emotional, spiritual,

social, professional, and financial health. It is who we are and how we live, allowing us to be the most vibrant, resilient, successful, and happy that we can be. We want to ensure we have a culture that sustains successful graduates, successful employees, and all of us as successful family and community members.

To accomplish this, OSU is emulating NPS by continually bringing together representatives of different departments representing non-traditional sectors that affect health such as housing, transportation, academics, environmental teams, employee health, and student affairs.

Like the NPS, OSU is dedicated to “ensure the health, well-being and resilience” of the people we serve, striving for “the best health outcomes where people live, learn, work, and play”. This requires a comprehensive wellness culture.



In addition to a cross-sector approach, a culture of wellness requires an integrated approach on individual, interpersonal, system (which requires policies) and environmental levels.

Like the National prevention council, the role of the Chief Wellness Officer is “to ensure health and prevention efforts are coordinated, aligned, and championed. The National Prevention Council recognizes that some opportunities are shared across all departments and that synergies may occur when all departments work together to make progress” using a flexible collaborative approach across sectors, considering prevention and health in areas where they may not typically be considered.

OSU is formalizing its culture of wellness across all its campuses and county extension service offices through an integrated collaborative approach that extends into the community, state and nation. As we build on current programs and services, it is important to make the right choice the easy (and fun) choice by offering healthy dining

options such as “Choose Orange” and that activity and social engagement is encouraged with walking paths, walking meetings, and free fitness memberships.

Of note for our state, the National Prevention Strategy recognizes the it “requires action beyond the federal government (but must include) the actions of state, tribal, local, and territorial governments, the private sector, philanthropic organizations, community- and faith-based organizations, and individual Americans are essential to improving health through prevention.

Aligning strategies at the national, state, tribal, local, and territorial levels can help ensure that actions are synergistic and complementary” This forum is an excellent example of that!

Like, NPS, a flexible approach allows each department to identify relevant processes and goals, increasing capacity, “enhancing mechanisms to align data and foster cross-sector information exchange, coordinating investments in communities, or communicating the relationship between health and departmental goals and objectives...Healthier communities can increase productivity, reduce direct (e.g., medical claims) and indirect (e.g., absenteeism) costs, and improve health outcomes.”

Like others, OSU has a strong workplace wellness program that is providing a return on investment (ROI) in decreased medical costs, pharmacy claims and sick days. Nationally, it is estimated that every dollar spent on health promotion returns \$3 in savings. At OSU, these savings helped the university hold insurance premium costs steady.

But OSU isn’t doing this strictly for the ROI. It is doing it for the VOI, or value on investment. It



OSU Wellness Strategy

is doing it because it is the right thing. OSU President Burns Hargis realizes that the value of wellness is the culture of wellness — a place where employees find joy in working; a place where students become healthy and engaged, successful graduates.

The results are increased productivity, decreased absenteeism, decreased injuries, more active engagement, strong work-life balance, more pleasure, more joy — essentially a higher

quality of life.

Who can put a price on such benefits?

Students are a significant part of our culture of wellness. OSU has the most students participating in intramural sports in the Big 12, which is even more impressive considering the majority of the conference’s members have a larger enrollment. This is not only physical health, but social and emotional health as well, as individuals compete and play on teams.

The ultimate benefit of a focus on wellness is the development of healthy, engaged, successful, productive employees and students, who are and will become healthy, engaged, successful, productive community members. They will lead the charge to raise the health of our state, and of our country today and tomorrow.

Oklahoma State University’s wellness reach extends beyond its campuses in Stillwater, Oklahoma City, Tulsa, and Okmulgee into to each of Oklahoma’s 77 counties through the wide range of services and programs offered by OSU’s cooperative extension offices. Through our efforts at OSU, as America’s Healthiest Campus®, and the great work of countless others across our state, we hope wellness, and all its benefits, comes to define every Oklahoman.

Best Practices in Oklahoma County

Gary Cox, JD and Alicia Meadows, MPH, MBA, Oklahoma City-County Health Department

The Oklahoma City-County Health Department (OCCHD) seeks to be a leader in the development of innovative and progressive initiatives designed to improve community health outcomes.

We have committed to careful and systematic evaluation of programming efforts to assure we are good financial stewards of the resources that we receive and allocate through our service provision throughout the Oklahoma City and County communities. We believe the following are examples of best practices in Oklahoma City and County that could be replicated in other areas of the state.

Wellness Now Coalition:

The coalition represents a cross-section of private business, local elected officials, non-profits and local governmental units that have successfully collaborated around common goals. Through the development of partnerships, the OCCHD has worked with others to ascertain more than \$1 million in operating funds to support efforts directly tied to the Community Health Improvement Plan.

This effort will celebrate 5 years of successful coalition-driven activities in April, 2015.

During that time frame, the coalition has helped to pass numerous tobacco-free ordinances and policies, increased the number of public schools with nutrition and physical activity policies, and supported the development of policies for active, livable communities.

The successes of the coalition are testament that our best efforts to improve health outcomes in the Oklahoma will depend on the engagement of local coalitions. Legislators and decision makers should seek to identify opportunities to continue to reduce barriers and strategically align resources according to need.

Wellness Now Business Alliance:

The Business Alliance is a newly formed subset of the Wellness Now coalition that is focused on generating private business partnerships in community-wide health improvement. Data indicates that as baby boomers begin to seek retirement, the new generation of workers is looking to settle in communities that demonstrate improved quality of life.

The health of a community is as much as retention tool as it is a recruiting tool—for employee and employer. As health insurance costs continue to increase, many businesses are looking for ways to cut operational costs by providing incentives to employees for maintaining a healthy lifestyle.

The Business Alliance will move beyond the walls of the individual company and engage businesses in giving back, through financial and/or human capital, for improved community health. Business sponsorships of low cost mobile markets for food deserts, regularly occurring Open Streets events, and similar efforts focusing businesses outwards are being planned for the Oklahoma City region with influential and prominent local business leaders championing the effort.

My Heart –

Integrated Care for Chronic Disease Prevention:

The My Heart project is based on a combination of best and promising practices available in the Community Preventive Services guide, published by the Centers for Disease Control, and in response to recommendations from the Institute of Medicine Reports released in April, 2012. The program began as a pilot project in 2011, focusing on a small segment of the Oklahoma City population at highest risk for cardiovascular disease (CVD).



The project, currently being expanded, integrates public health case management and case-finding, and behavioral and lifestyle changes, with access to regular primary and mental health care needs provided by partners co-located within health department facilities.

The project uses a multi-disciplinary team of providers from OU Physicians, Northcare Mental Health and the OCCHD to provide a continuum of services we consider a community-centered health home. This approach wraps services around the patient at a single point of contact, depending on their care needs.

In the three years since the OCCHD introduced the program, overall mortality in the Oklahoma City-County region decreased by 1.2%, stroke mortality decreased by 3.9% and CVD mortality decreased by 2.9%.

We believe these improvements are a result of the multiple resources of our agency and the partners of Wellness Now collectively focusing on a portion of the community most impacted by poor health outcomes. The improvements observed in a three-year time period are substantial for population health improvement

Leveraging IRS Form 990 Requirement and Increasing Access to Population Health Data:

In Partnership with INTEGRIS, the OCCHD recently launched a community-based Healthy Communities Institute (HCI) dashboard that enables



residents to view health data and other demographic and socio-economic information at the zip code, city and county levels for all zip codes falling within the jurisdiction of the OCCHD.

This partnership enables citizens to mobilize around issues of concern, seek additional grant dollars, and support research around best practices and opportunities for policy, systems and environmental change. The dashboard aggregates data in a format that is easily

understandable and that provides a real-time measure of improvement and areas of focus for Oklahoma City and County residents.

Translating the dashboard into a statewide platform that engages all non-profit hospitals across the state would be a valuable asset for communities. It would reduce duplication of already scarce resources and allow for careful evaluation of activities among different communities across the state.

The cost of developing and sustaining the HCI is minimal, however its value-added for measuring population health improvement, allocating resources, and mobilizing grassroots support for notable issues and concerns is far-reaching. Creating state tax benefits or incentives to non-profit and for-profit hospitals to support statewide implementation would provide Oklahoma with an accurate baseline from which to measure improvement in a transparent manner.

Technology vs. Abuse of Legal Drugs

David Kendrick, MD, CEO MyHealth and Joe Cunningham, MD

An important contributor to premature death in Oklahoma is drug and alcohol abuse. In particular, Oklahoma suffers one of the worst epidemics of prescription narcotics abuse.

Multiple public policy interventions have been proposed which would encourage or require providers to check the state's PMP database prior to prescribing narcotics.

Most policy proposals have failed secondary to concerns raised by the healthcare providers and hospitals that the methods proposed would significantly delay patient care and potentially harm quality. Despite this opposition, providers insist they are committed to helping address this serious issue and a workable, implementable approach is being sought by all.

MyHealth Access Network makes healthcare safer and more convenient for patients by connecting doctors, hospitals and emergency rooms throughout the state into an electronic network for exchanging healthcare records securely.

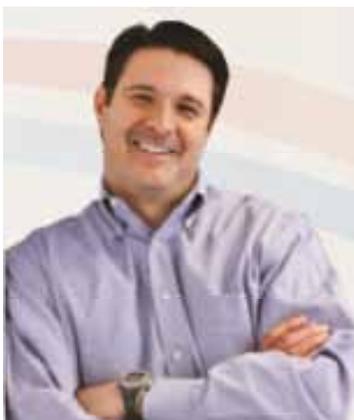
MyHealth serves more than 3M patients and through more than 600 locations around Oklahoma by alerting their doctors about overdue lab tests and preventive care, as well as notifying them when their patients have been in the emergency room or admitted to the hospital. MyHealth improves patient safety by ensuring that all prescriptions

written by participating providers are documented and available to prevent the prescription of conflicting or interacting medications.

These same capabilities could be leveraged to help get Oklahoma's narcotics abuse issue under control, while at the same time satisfying providers' concerns about patient care delays and quality.

With appropriate changes to Oklahoma law, MyHealth could work together with OBN to do the following:

- Provide secure, convenient access to the PMP data through the MyHealth Physicians' Portal. This view would be even more helpful because it can present the narcotics dispensing data together with the rest of the patient context such as medical problems, other medications, procedures and hospitalizations.
- Provide the PMP with access to MyHealth's electronic master patient index to prevent the possibility of mistaken identity that has affected a number of Oklahomans and caused uncomfortable situations for patients and providers.
- Generate regular reporting to practices on their patients with frequent narcotics use so that action may be taken proactively to address a potential problem—before it becomes a law enforcement issue.



“It is important to make the investments of time and technology required to support the community.”

-Dr. David Kendrick

Employers Can (Should) Be Health Leaders

Rhonda Simpson, Oklahoma City Community College

Employers can lead the charge to improve the health of Oklahomans. To even begin addressing the health of any population, at any level, it is important that individuals understand their own health status and what risk factors are present. Becoming an active participant in one's own health is a key component in any attempt to affect necessary behavior change.

To embark on a wellness initiative at Oklahoma City Community College, the first step involved understanding the health of the faculty and staff. A Health Strategies Task Force was created to include representation across campus, including faculty and varied staff classifications.

By utilizing health insurance aggregate claims data, the Task Force discovered the top five most chronic diseases were hypertension, cancer, diabetes, heart diseases and asthma. The top five most expensive chronic diseases were cancer, heart disease, diabetes, hypertension and chronic pulmonary disease.

Preventative screenings for breast cancer, cervical cancer and colon cancer were well below HEDIS standards and national guidelines. Projections related to family history normative data indicated that diabetes, heart diseases, and hypertension diagnosis could potentially more than double within the OCCC population over the next ten years.

Wellness programs at the time were Level One "Participation Only" programs, i.e., Weight Watchers @ Work, health fairs, 5K Life Saver run, Grand Slam Challenge, free on-site health screening services etc. The health insurance

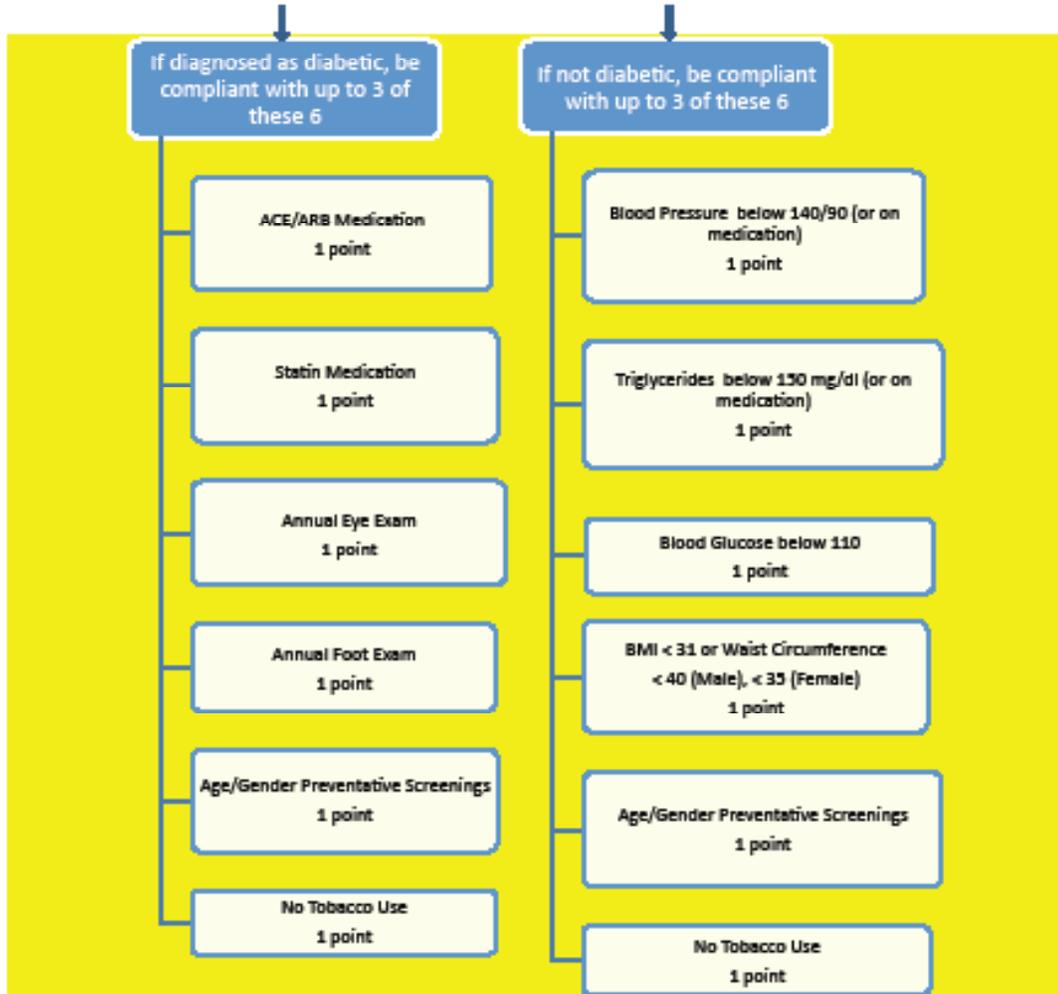
plan was designed to remove co-payments for preventive screenings and services, thus removing the barrier for participants to claim finances as a reason for not getting their appropriate screenings. Despite these efforts, participation in the wellness program was a mere 7%.

The Health Strategies Task Force recommended that the institution move to a Level Two program that tied participation to the medical insurance plan, then to a Level Three program that is based on meeting specific health standards. The recommendation sought to encourage employees to take responsibility for the lifestyle decisions that affect their health and well-being. The Level two program required participants to complete a health risk assessment and biometric screening to establish a health baseline with no performance standards. Health Risk Assessments were online via the insurance company's website and the biometric screenings were held on campus in a one-week time frame. Until this time, health insurance premiums were paid 100% by the employer. To put more "teeth" in the wellness program, employees would be responsible for \$100/month health insurance premium, that could be waived by completing the health risk assessment (\$50/month) and the biometric screening (\$50/month). Amazingly, participation increased to 94% that year.

The data gleaned from the health risk assessments and biometric screenings led the Task Force to recommend a Level Three program that increased the employee cost-sharing premium (\$200/month) while implementing a premium reduction based on meeting specific health standards as follows:

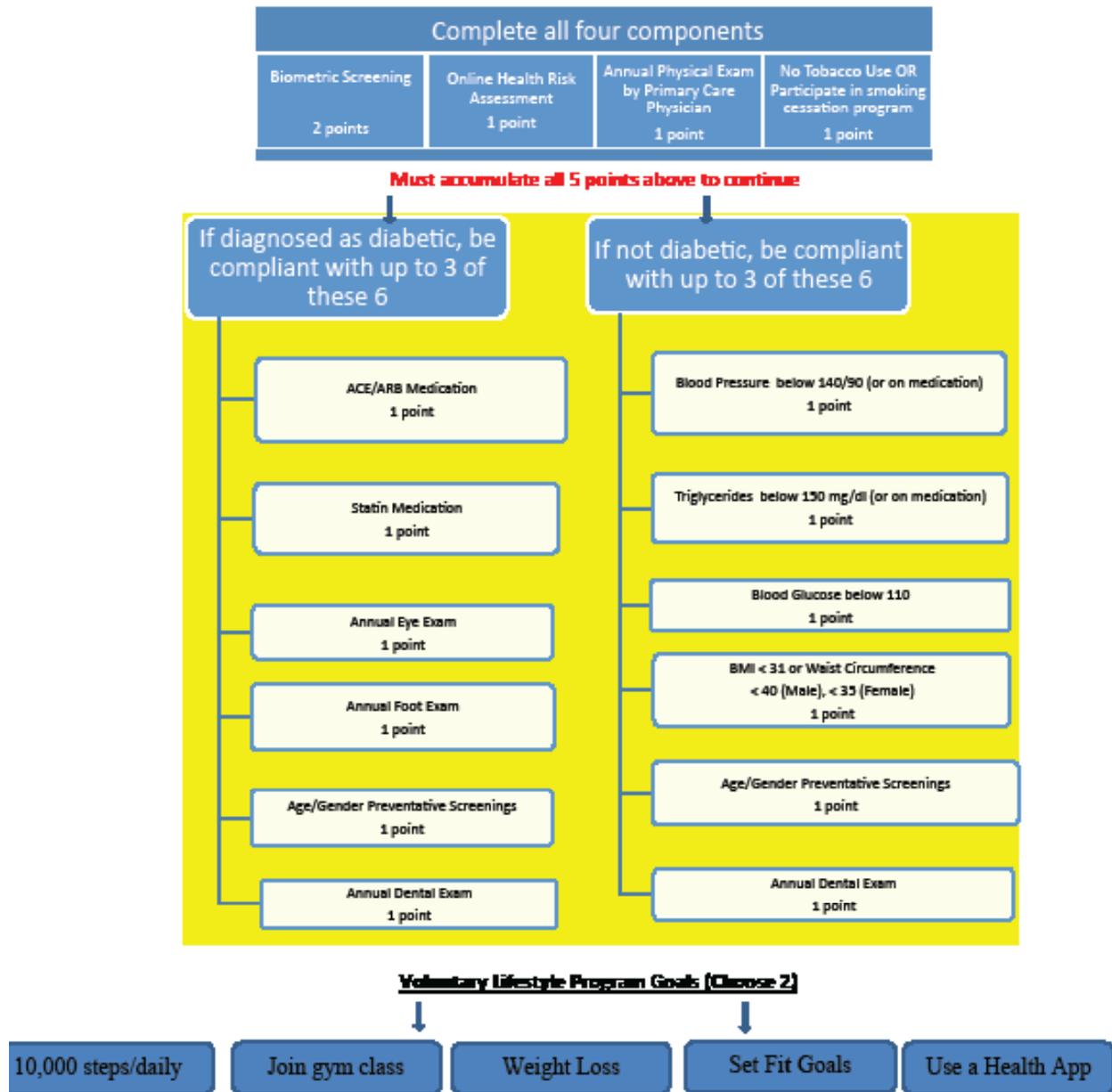
Complete all three components		
Biometric Screening 2 points	Online Health Risk Assessment 1 point	Annual Physical Exam by Primary Care Physician 2 points

Must accumulate all 5 points to continue



A third-party administrator was engaged to aggregate the data from medical insurance claims and secure-site form submissions as well as calculating points for each participant. Results are reported to the Health Strategies Task Force, with no individual-identifying information, and used to determine the next phase of the wellness program. Participation increased to 96% for year two.

In the first two years of implementing a results-oriented wellness program, diabetes moved from being the top chronic disease at OCCC to number three. The focus for the third year, Level Three program turned to tobacco use. To even qualify for the last three points and 100% premium waiver, a participant must not use tobacco or be in a smoking cessation program, in addition to doing a health risk assessment, biometric screening, and having an annual physical. Once those four criteria are met, the participant chooses which standard to meet for the remaining three points:



Creating a culture of wellness begins with support from the top. Changing personal behaviors is ultimately up to each individual. However, employers have a tremendous opportunity to help their employees to see the value of adopting healthier behaviors so they can be more productive employees and have healthier lives.

The Oklahoma City Diet

Mick Cornett, Mayor, Oklahoma City

This City is Going on a Diet: A Million Pounds Lighter, Oklahoma City Makes Plans for a Healthier Future

The final straw was a 2007 Men's Fitness magazine story ranking Oklahoma City No. 2 on a list of the nation's "fattest cities." A community awash in fast food restaurants and designed for automobiles, Oklahoma City was a regular fixture on lists for obesity and general unhealthiness.

Oklahoma City Mayor Mick Cornett read the Men's Fitness report and decided enough was enough.

Cornett, who had struggled with his own weight through the years, checked his height and weight on an U.S. government health-and-wellness index website and discovered he fell into the obese category. Shocked, he immediately changed his eating habits and began losing weight.

"I had struggled with my weight for years, losing and gaining over and over again," he said. "I was doing pretty well until I won the Mayor's election in 2004. I then realized that 'everyone wants to feed the mayor.' I had always exercised but I had to develop a different strategy for eating. It meant saying 'no' to food a lot."

After successfully shedding 40 pounds, Cornett called a press conference on New Year's Eve in 2007 and announced he was putting the entire city "on a diet," challenging the community to lose a collective one million pounds.

The audacity of the challenge received national attention. Mayor Cornett and his citywide diet were featured on "Ellen," "The Rachael Ray Show," "Real Time with Bill Maher," Fox, MSNBC, CNN, and in The New York Times, The Los Angeles Times and nearly every newspaper and publication in between.

Cornett said that after confronting obesity in his own life and examining the issue on a community basis, he felt the need to get a broader conversation started about the issue. "We had been listed as one of the most obese cities in the country but

it appeared to me that we in Oklahoma City were in denial and were secretly hoping that the problem would go away on its own if we ignored it," he said.

Within the community, "This City is Going on a Diet" kick-started a conversation on the troubling health and

economic outcomes associated with obesity. Over the next four years, Cornett worked tirelessly to promote the campaign and raise awareness of the issue. He became a popular speaker on the topic nationally and held quarterly press conferences locally.

The "This City is Going on a Diet" awareness campaign ultimately inspired more than 47,000 people to record their weight-loss efforts en route to the million-pound goal.

"Oklahoma City is now a million pounds lighter, which is a remarkable achievement. But more importantly, we raised awareness of the issue and started an ongoing conversation about the health risks and financial costs of obesity," Cornett said.



1 MILLION POUNDS LOST

THE AVERAGE ELEPHANT WEIGHS 10,000 LBS

WE LOST THE EQUIVALENT OF 100 ELEPHANTS!



That ongoing conversation eventually made its way into public policy decisions on city planning and urban design.

The City was discussing the follow-up to its successful Metropolitan Area Projects initiatives – a penny sales tax, voted on by the people, for specific capital improvement projects. The first MAPS project had rejuvenated a struggling urban core. The second MAPS project rebuilt an entire school district. In addition to a new convention center, it was decided MAPS 3 would feature quality-of-life projects that also encouraged a more active lifestyle.

When it was unveiled, MAPS 3 called for a December 2009 vote on a continuation of the one-cent sales tax for a period of seven years and nine months. The total \$777 million would build, among other things, a 70-acre, \$130-million central park linking downtown with the Oklahoma River; a rail-based streetcar system; new sidewalks; 50+ miles of new bicycling and walking trails throughout the city; a public whitewater kayaking facility on the Oklahoma River; and neighborhood senior wellness centers throughout the city. All are currently in the planning and design phases.

In addition, gyms are being added to 47 Oklahoma City elementary schools that did not previously have gymnasiums and fried foods were removed from Oklahoma City school lunch offerings. At the same time, \$140-million in TIF funds from the construction of the new Devon Energy Center were targeted to redesign and rebuild the streetscapes throughout the city's core. Streets are currently being narrowed, sidewalks widened

and trees added throughout downtown to create a more pedestrian-friendly community. The city also introduced “Spokies” a new bike-sharing program available throughout the urban core.

A city once designed for cars was being redesigned for people with active lifestyles.

“We started a conversation and realized cities can play a concrete role in better health outcomes through better design. We are designing a city with better sidewalks, more hike-and-bike trails, more parks, neighborhood senior wellness centers, Olympic-caliber rowing and kayaking venues – all designed to encourage more active lifestyles in our community,” said Cornett.

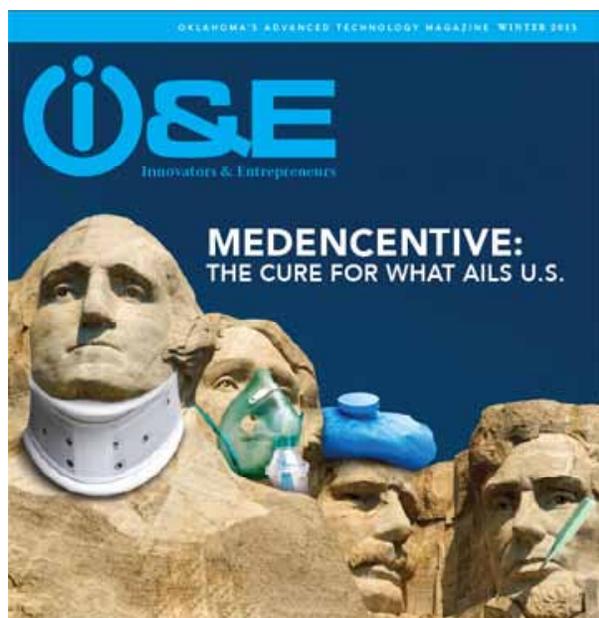
The story came full circle when Cornett, in New York City to do an interview with Men's Fitness magazine, sat in their lobby and thumbed through the publication's just-released March 2012 issue.

“The cover of the new issue has a bold headline asking if you live in ‘The Fattest Cities in America.’ I turned to the article, assuming we would be one of the 25 cities listed – but hoping we'd improved and moved down the list. I read the entire list – twice – and we weren't on it,” said Mayor Mick Cornett. “Then I turned the page and found that we were now on their list of fittest cities.”

“We should feel great about this new ranking. Clearly we're doing better and clearly we have a long way to go,” he said. “We still have room for improvement and I think it's probably going to take a decade to really change behaviors.”

Oklahoma Ingenuity and Health

Jeff Green, CEO, MedEncentive



In Pursuit of the Three-Part Aim: This is a story of Oklahoma ingenuity and perseverance in solving our country's health crisis.

Resolving the U.S. health crisis requires simultaneously solving three specific objectives: improving health care, improving the health of large and varied populations, and reducing per capita costs of health care. Leading policymakers now collectively refer to these objectives as the “Three-Part or Triple Aim.”

This is a familiar term in parts of the country where there are concentrations of health reform activists, but very few people in Oklahoma have ever heard of the Three-Part Aim. Interestingly, a small group of innovators in the Sooner State have developed what many believe is the most viable solution to this elusive goal. I am one of those innovators and this is our story.

Evolving a Solution to the Three-Part Aim

Solving the Triple Aim has proven to be easier said than done. Initiatives such as HMOs, wellness programs, disease management, pricing controls,

consumer driven health, etc. have failed or are failing because they were not designed accomplish the ultimate objective – the Three-Part Aim.

Beginning in 1998, two Oklahoma City physician leaders, Dr. Susan Chambers and Dr. David Parke, and I began meeting weekly to help guide local doctors in the managed care marketplace. Our “breakfast club” continued to meet non-stop, for ten years.

From the beginning, we were intent on “thinking outside the box,” regularly placing ourselves in the shoes of each healthcare stakeholder. This led to the recruitment of Jim Dempster, who brought the perspective of the health insurer. It also led to the conclusion that a solution could only be sustained if it aligned the interests of the health care’s three key health stakeholders – patients, providers and insurers. We referred to this alignment as “triangulation.”

In the process of developing our solution, we discovered the following facts and concepts:

- Accomplishing the Three-Part Aim is principally about motivating the three key health stakeholders to improve their behaviors.
- Money is the only means of motivating improved human behavior employed by almost every health reform initiative.
- Money is like a sugar high, very powerful, but not very long lasting. This and other limitations of financial inducements are part of the reason why every health reform initiative has failed and will continue to fail.
- Behavioral economics teaches that money is most effective when used to: 1) condition a behavior through immediate and frequent rewards (Pavlov); 2) support small incremental improvements; 3) arouse the sense of loss (sale

to expire soon); and 4) stimulate the strike-it-rich mentality (lottery).

- In any given population, the strongest detriment of health status, life expectancy and per capita health care costs is the population's level health literacy. This is a key fact.
- People are more prone to be adherent to recommended treatments and healthy behaviors when they understand the "how" and "why." In psychological terms, this is called the "knowledge-adherence response."
- Knowledge not only motivates, it also empowers.
- Information therapy is the process of providing the right health information at the right time, so a person can make an informed decision about his/her health. It is symbolized as Ix, a registered trademark of the eHealth Initiative).
- A person's knowledge of pertinent health information is unknown until it is tested and recorded, and then made available to the person's clinician. This critical feedback loop is missing in health care.
- The doctor-patient relationship is unique in the human experience. Doctors want their patients to trust and respect them (customer psychology). Patients don't want their doctors to think they are health illiterate and non-compliant (the benevolent authority-adherence response). Therefore, the doctor-patient relationship offers an important means to motivate both parties.
- Money can be best used to invoke other equally powerful, longer lasting motivators, such as the knowledge-adherence response and the benevolent authority-adherence response.

Using engineering principals, we and a host of passionate collaborators created a web-based incentive system that incorporates all of what we had learned about improving human behaviors. Without going into too much detail, this system

financially rewards both doctors and patients for declaring or demonstrating to each other, adherence to specific performance standards. We described this process of checks and balances as "mutual accountability."

The system's foundational performance standards for doctors and patients are evidence-based treatment guidelines and information therapy, respectively.

Typically, doctors and patients are offered an opportunity to voluntarily participate in our program with each office visit. Health insurers (employers, health insurance companies, and governments) underwrite the financial incentives and administrative costs of the program, with the expectation that "mutual accountability" and "information therapy" will produce cost savings in excess of their investment.

Since patients, providers and insurers all stand to win by holding each other accountable, the concept became known as the Trilateral Health Accountability Model™ or THAM™. It is a patented method owned by an Oklahoma company (MedEncensive).

Trial Installations and Independent Validation

In 2004, we launched the program with the City of Duncan. From the very beginning, the system's web applications functioned as designed, doctors and patients were well pleased with their experience, and the program lowered costs.

Additional installations were launched in Oklahoma, Kansas and Washington State. In late 2009, we wrote a five year retrospective describing our experiences and findings. Researchers at the University of Kansas School of Medicine (KUSM) read the retrospective and offered to validate our findings. Using a government grant, the KUSM researchers studied two separate installations. They confirmed that both sites had experienced a reduction in hospitalizations and emergency room visits, which produced a sizeable return on investment over multiple years, after the introduction of our program .

In 2011, The Loomis Company, a Pennsylvania-based plan administrator, replicated the KU study with an installation in Washington State, and reported very similar findings¹.

Subsequently, three of the top ten stop-loss carriers (Sun Life, AIG and IHC Risk Solutions) reviewed our program and these independent studies, and for the first time in the history of the industry, publicly announced universal discounts on stop-loss coverage to any employer that adopts THAM.

As result of this validation, MedEncentive was awarded the 2013 Risk Innovator of the Year by Risk and Insurance® magazine. This international award is made to innovations that are both novel and proven to mitigate risk. We are the award's first Oklahoma recipient and the first in the category of health since 2009.

The State of Oklahoma Pilot

Having been familiar with the program and impressed with our progress, Oklahoma legislative leaders asked us prior to the 2011 legislative session if we'd be willing to put the program to the test in a matched-cohort study involving teachers and state employees. We agreed if they would ensure that the study be fair and impartial.

House Bill 1062 enjoyed widespread support and passed the Oklahoma Senate 46-0 and the House 86-9. At a time of intense partisanship on the subject of health reform, we know of no other elected body anywhere in the country that has passed a health reform initiative, unanimously.

As illustrated in the graphic below, the statute calls for a three-year pilot with a “doctor-patient mutual accountability” incentive system involving at least 15,000 teachers and state employees covered by the State’s HealthChoice health plan, compared to the remaining HealthChoice population (110,000 lives).

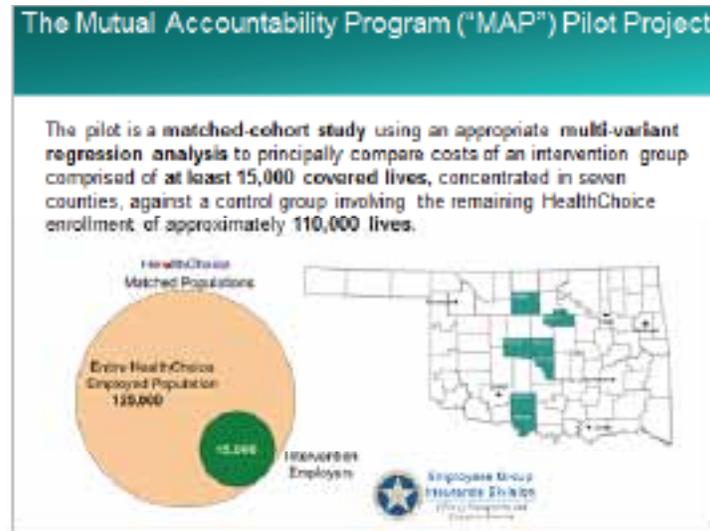
The intervention group is comprised of 41 separate state agencies, school districts and local governments, selected as a matched subset of the entire HealthChoice population. To add a degree of real-world authenticity to the pilot, the intervention group employers are concentrated in seven counties.

The pilot was successfully launched on January 1, 2014. It has progressed as planned and is developing into one of the largest, most transparent health improvement/cost containment experiments ever attempted in the U.S.

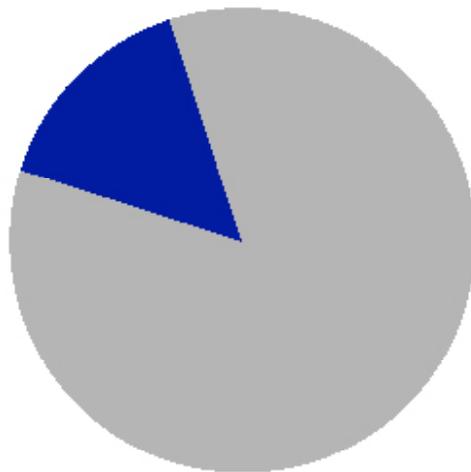
If we replicate the kind of results achieved in previous trials, then the program will be expanded to all HealthChoice beneficiaries. At that point, we suspect it will grow much beyond HealthChoice and the state of Oklahoma.

We are actively seeking additional match-cohort studies in other parts of the country. We know of no other health reform solution offering to do the same .

More precisely, we believe THAM is one of the most viable solutions to the Three-Part Aim, anywhere. And it was invented right here in Oklahoma. We welcome examination and are anxious to move ahead in solving Oklahoma and our country’s health crisis.



Section 11
SOCIAL CIRCUMSTANCES



Health Equity Position Statement

Oklahoma Health Equity Campaign

We are social by nature and when the ties that bind begin to unravel, so does our health.¹

HEALTH EQUITY is when everyone has the opportunity to “attain his/her full health potential” and no one is disadvantaged from achieving this potential because of social position or other socially determined circumstance.²

HEALTH begins at home in our families, with a loving relationship between parents and their children, where kids can expect to be safe, nurtured and protected.

HEALTH begins with healthy communities, with safe streets and sidewalks, freedom from violence and parks where kids can play.

HEALTH begins with a good education, where children learn not only how to read, write, and prepare for fulfilling, prosperous lives, but how to treat each other with dignity and respect.

HEALTH begins with safe jobs and fair wages, where people derive a sense of personal satisfaction from their work and connection to their co-workers.

HEALTH begins with healthy relationships, healthy communities and healthy jobs, which protect us from the stress of everyday life.

FACTS

OKLAHOMANS with lower socioeconomic status die earlier and have more disability.^{3,4}

OKLAHOMA ranks 19th highest adults without a high school diploma (14.4%), ranks 6th lowest in median household income (\$41,664), ranks 7th highest in the percentage of individuals uninsured (18.7%) among all states (including District of Columbia).⁵ Oklahoma ranks 3rd in incarcerations (655 per 100,000, 32% higher than the national average) among 50 states.⁶

OKLAHOMA ranks at the bottom of the national health rankings, according to the United Health Foundation (43rd) and the Commonwealth Fund State Scorecard (50th).

OKLAHOMANS suffer more unhealthy days (mentally and physically) than adults nationally with suicide being the most common type of violent death according to the 2008 State of the State’s Health Report.

OKLAHOMA consistently ranks among the lowest states in the consumption of fruits and vegetables⁷ and is ranked as the 5th most obese state.⁸

OKLAHOMA is 49th in the nation in the limited availability of primary care physicians per 100,000 population.⁹

Oklahoma Health Equity Campaign (OHEC)

State health organizations and community leaders have joined forces to shine the light on the glaring socio-economic and racial inequities in health and to search for ways to fight their effects on Oklahomans. The campaign alerts state and community leaders on socioeconomic and ethnic inequities in health and engages leaders in conversation and action to fight the effects of these inequities on Oklahomans. We can no longer assume that all citizens in Oklahoma will have equal opportunities for prevention interventions that lead toward behaviors conducive to health. Our individual aspirations for better health are not only for medical and lifestyle interventions but to “upstream” policies — investing in our schools, improving housing, integrating neighborhoods, creating living wage jobs with career ladders, even more equitable fiscal policies. When health equity through resource opportunities is achieved, then all citizens will be positioned to adopt healthy behaviors, leading toward improved health status for Oklahoma.

OKLAHOMA reports that 65% of infants and toddlers have at least one known risk factor to increase the chance of poor health, school and developmental outcomes.¹⁰

ACHIEVING HEALTH EQUITY

Organizations and families create communities by building and nurturing a healthier Oklahoma. This will require leadership and a partnership of business, government, civic, faith-based and educational institutions. We can't eradicate illness, but we can foster health by positively impacting the factors affecting health.

THE OKLAHOMA HEALTH EQUITY

CAMPAIGN PARTNERS collaborates with public and private organizations, governmental and community partnerships to build public commitment to achieve health equity and decrease the health inequities in Oklahoma. Our partners include businesses, advocacy groups, community non-profits, environmental justice organizations, chambers of commerce, faith-based organizations, labor organizations, professional associations and people like you and me that want our families to be healthy and happy.

1. Robert Wood Johnson Foundation. *A New Way to Talk About the Social Determinants of Health*, July 28, 2010.
2. Brennan Ramirez LK, Baker EA, Metzler M. *Promoting Health Equity: A Resource to Help Communities Address Social Determinants of Health*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2008.

3. *Oklahoma Health Improvement Plan, 2010-2014*. Urban Institute and Kaiser Commission on Medicaid and the Uninsured (Estimates of 2007-2008 data). U.S. Census Bureau, March 2008 and 2009, Current Population Survey (CPS: Annual Social and Economic Supplements). Retrieved November 22, 2009 www.statehealthfacts.org/
4. DeNavas Walt, Carmen, Proctor, Bernadette D. & Smith, Jessica C. (2008, Aug). *Income, poverty and health insurance coverage in the U.S.: 2007*. U.S. Census Bureau. (U.S. Census Bureau, pp. 60-235). www.census.gov/prod/2008pubs/p60-235.pdf.
5. U.S. Census Bureau. (2009, September) *American Community Survey*. NOTE: Data reflects percentage of adults aged 25 and over who had not received a high school diploma, GED or alternative credential, or higher degree. <http://www.census.gov/prod/2012pubs/p20-566.pdf>
6. National Institute of Corrections (2009). Retrieved from <http://nicic.gov/features/statestats/?state=ok>
7. Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2007.
8. Centers for Disease Control and Prevention (2009). *U.S. Obesity Trends*. Retrieved from www.cdc.gov/obesity/data/trends.html
9. United Health Foundation *America's Health Rankings Report*, 2011.
10. National Center for Children in Poverty, "Young Child Risk Calculator." National Center for Children in Poverty, 2012. www.nccp.org



Perspectives on Violence

Oklahoma Committee on Violence and Public Health, Jeff Hamilton, Chairman

Daily we see evidence of America's growing concern about violence reflected in television and newspapers which headline stories of political violence, gang violence, serial killers, and random shootings. The message inferred is that no one is safe and there is nothing that can be done to stop the violence. In cities and rural areas alike, some or many people are fearful and concerned that violence is a problem that is out of control and unraveling the very fabric of our society. To begin to understand more about this issue of great concern to Oklahoma communities, the misconceptions about violence and the conditions that lead to violence must be addressed.

Violent death in Oklahoma is a significant cause of mortality.

Many of us form our beliefs or assumptions about violence from broadcast and print news. Violent events in the U.S. and in Oklahoma almost invariably make top news stories every day. According to the Centers for Disease Control and Prevention (CDC), in 2010, more than 54,000 people were victims of homicide or suicide. There were more than twice as many suicides as homicides in our nation.

In 2010, Oklahoman deaths from suicide and homicide combined surpassed deaths from motor vehicle traffic crashes (680) and unintentional poisonings (662). According to 2010 Oklahoma Violent Death Reporting System (OKVDRS) data, 650 people died by suicide and 227 were victims of homicide/legal intervention.

The age-adjusted suicide rate in Oklahoma was 36% higher than the U.S. rate (16.5 and 12.1 per 100,000 population, respectively) and the homicide rate was 8% higher than the U.S. rate (5.7 and 5.3, respectively). The costs of suicide and homicide in Oklahoma in 2010 alone were estimated at \$1.1 billion in medical care and lost productivity.² In addition to deaths from suicide and homicide/legal

intervention in Oklahoma during 2010, there were 121 deaths of undetermined manner (intent) that were possibly related to violence, and 6 deaths from unintentional firearm injuries.

Violent acts are not typically the work of career criminals. Although news media highly publicize serial murders or serial rapists, these individuals are responsible for only a small portion of the violence in our society.

Most often violence is committed between persons who know each other. The home is the most common site for violence to occur, and the data regarding child and elder maltreatment and domestic violence illustrates that the home is a far cry from the safe haven we have envisioned it to be. Intimate partners, family members, or friends and acquaintances are the suspects in 65% of homicides. Only 8% of homicides are committed by a stranger.³

In acts of violence, the victim and the perpetrator are most often from the same socio-economic and racial/cultural group. Data has shown that most often the perpetrator of violence is of the same racial/cultural group and socioeconomic background as the victim. Gang violence is an example of persons from the same racial/cultural groups and economic backgrounds targeting each other for violence.

Poverty is a major contributor to violence. Blacks and Hispanics of all ages appear to be the victims of violence at a higher rate than their white counterparts; however, when socioeconomic factors are controlled for, the differences between racial groups are minimal. Therefore, poverty is likely a major risk factor for violence rather than racial group. In 2012, one in six Oklahomans lived in poverty.

The rate of Oklahomans living in poverty has exceeded that of the nation since 1990.⁴

Oklahoma's women, young adults, and non-whites had the highest rates of poverty in 2012. Oklahoma's southeast region had the highest poverty rate (21%) in the state compared to 13% in the northwest region. In 2012, the poverty threshold for a family of 4 was an annual household income of \$23,283 or less and for a single adult it was \$11,720.⁵

Deterring crime is not the same as preventing violence. Deterrents to crime such as burglar alarms, security bars, and neighborhood watch programs may reduce the likelihood of being burglarized, but do little to reduce violence. Many believe that owning a gun is a good way to protect their home and family.

On the contrary, people who keep a gun in the home are at increased risk of injury or death because the very gun acquired for protection will more likely be used against them by an acquaintance, relative, and may increase the risk for suicide. Again, the majority of violence in our society is committed neighbor against neighbor, acquaintance against acquaintance, and family member against family member.

Longer prison sentences alone will not reduce violence. In the U.S., the response to violence has been either tacit acceptance (even approval) or ignoring its existence or punishment generally in the form of imprisonment. In 2011, 55.6% of the 1,131,210 sentenced prisoners in state prisons were being held for violent crimes (this number excludes the 200,966 prisoners being held due parole violations, of which 39.6% were re-incarcerated for a subsequent violent crime).⁶

Length of imprisonment may not be an effective means of deterring or controlling violence. Increasing the probability of imprisonment may prevent more violence than increasing the length of imprisonment, especially in the arena of domestic violence and sexual assault. Prevention strategies have the potential of being as effective, or even more effective, in the reduction of violence as punishment by imprisonment. Oklahoma ranks 3rd in incarcerations (655 per 100,000 – 32% higher than the national average) among 50 states.⁷

A better understanding of factors that lead to violence will aid in violence prevention. Effective prevention strategies require the understanding of how the potential for violent behavior develops. Violence encompasses a large array of facts and circumstances. However, many factors that contribute to violence are the same no matter what form the violence takes. We cannot accomplish the goal of improving health, social, and economic well-being of all Oklahomans without the prevention of violent and abusive behaviors.

Policy Recommendation

Form an oversight committee to monitor the issue of the effects of violence on society and work toward legislation to fund what is pertinent to prevention such as a comprehensive violence prevention effort.

Sources

1. Oklahoma Council on Violence Prevention, Oklahoma Criminal Justice Resource Center and Oklahoma Statistical Analysis Center, *Violence in Oklahoma: A Case for Prevention*, 2002
2. Centers for Disease Control and Prevention. Data & Statistics (WISQARS): Cost of Injury Reports. <http://wisqars.cdc.gov:8080/costT>. (Accessed 5 May 2014).
3. Oklahoma State Department of Health, Injury Prevention Service. *Violent Deaths in Oklahoma, Oklahoma Violent Death Reporting System, 2004-2010*. http://www.ok.gov/health2/documents/OKVDRS_Violent_Deaths_2004-2010.pdf. (Accessed June 19, 2014).
4. U.S. Census Bureau. 2008 American Community Survey. Available at http://factfinder.census.gov/home/saff/main.html?_lang=en.
5. U.S. Census Bureau. Poverty thresholds (2012). Accessed at <http://www.census.gov/hhes/www/poverty/data/threshld/index.html> on 07MAR2014.
6. U.S. Department of Justice Bureau of Justice Statistics: "Prisoners in 2012 Trends in Admissions and Releases, 1991–2012" by E. Ann Carson and Daniela Golinelli Table 11: Estimated sentenced state prisoners on December 31, by most serious offense and type of admission, 1991, 2001, 2006, and 2011 | December 2013
7. National Institute of Corrections (2009). Retrieved from <http://nicic.gov/features/statestats/?state=ok>.

Supportive Document: Health Equity Position Statement, Oklahoma Health Equity Campaign, 2014

Coping with Bullying and Relational Aggression

Shannon Evers, CEO, Girl Scouts of Western Oklahoma

Girl Scouts builds girls of courage, confidence and character who make the world a better place. Our goal is to give girls the tools and skills they need to lead a happy, healthy life and create positive change in their communities. To do this, we offer a variety of age-appropriate programs to girls in kindergarten through twelfth grade that meet the ever changing needs of girls today.

According to the Girl Scout Research Institute's The State of Girls report, about 30 percent of girls have experienced some form of bullying or relational aggression from their peers. Research indicates a range of health consequences associated with this peer-to-peer violence, including drug and alcohol abuse, cutting, depression, and eating disorders. Girl Scouts is committed to helping girls develop and maintain healthy relationships and prevent bullying behavior outright.

Bullying can take many forms, but girls are often more likely than boys to use a subtle, indirect, and emotional form of bullying called relational aggression. Relational aggression encompasses

behaviors that harm others by damaging, threatening, or manipulating one's relationship with her peers, or by injuring a girl's feeling of social acceptance.

According to a 2013 study by the Girl Scout Research Institute titled The State of Girls: Unfinished Business, about 21 percent of girls ages 12 to 17 report that another student in school has spread rumors about them and about 20 percent report that another student has made fun of them, called them names, or insulted them personally. Relational aggression, which also includes online cyberbullying, is just as harmful as physical bullying to a student's ability to learn and succeed.

Cyberbullying is a type of relational aggression that takes place exclusively via electronic technology, which can include social media sites, instant messaging programs, email, cell phones, and other websites. GSUSA has created programs that target middle school age girls to help them develop healthy peer relationships.

Bullying prevention efforts in schools and by youth-serving organizations, such as Girl Scouts, can build essential personal and social skills to reduce the negative impact of bullying and encourage girls so they can thrive academically and in life.

Girl Scouts launched the Be a Friend First (BFF) program in 2012 to address bullying and relational aggression among girls. BFF is offered as a short-term program through school, community

organizations, and faith-based partnerships. The program lets girls work through issues on their own terms while building healthy relationship skills, understanding relational aggression more fully, and

learning about conflict resolution and bullying prevention.

A spring 2013 evaluation of BFF was conducted in partnership with 24 Girl Scout councils nationwide and included over 1,500 middle school girls representing a diversity of geography and backgrounds.

The findings indicate that girls who participated in the program developed a greater awareness of what constitutes bullying and a majority of girls experienced significant growth in conflict resolution skills.



Perceptions of Bullying

- Prior to the start of BFF, forty-six percent of middle school girls in the study indicated that they had been victims of bullying, and over 50% of girls shared that they see bullying as a “big” or “huge” problem.
- Sixth graders and Hispanic girls were more likely to see bullying as a “huge” problem.

Key Relationship and Leadership Skills Developed

- Analyses of matched surveys show that girls who participated in BFF gained important leadership and relationship skills based on their experience of the program as 1) girls strengthened their sense of self; 2) girls gained the ability to resolve conflicts; and 3) girls developed the skills to educate and inspire others to act.
- In particular, a majority of girls experienced significant growth in conflict resolution skills (average growth in conflict resolution skills of 26% over the course of the program).
- Girls also reported increases in their “Friend First” or friendly, pro-social behaviour. However, their relationally aggressive and bystander behaviour remained unchanged.

Hispanic Girls Benefit Even More from This Gender-Specific Programming

- Evaluation findings reveal that Hispanic girls may reap even greater benefits from the program — demonstrating even more improvement in their development of a strong sense of self and the ability to resolve conflicts, than their non-Hispanic peers.

What Should Be Done and Next Steps

In the spirit of building girls of courage, confidence, and character, Girl Scouts supports all policy efforts to:

- Link national prevention efforts and programs aimed at youth to reduce relational aggression, bullying, and adolescent violence and create safe schools and communities;
- Engage high-quality, evaluation based, youth-serving organizations as partners with schools and parents to provide education and skills training; and
- Continue researching programs that effectively change attitudes and behaviors around the acceptability of bullying and relational aggression.

Summary

As Girl Scouts moves into its second century, it can be a resource to policymakers and educational decision makers, courtesy of our national, evidence-informed programming, the Girl Scout Leadership Experience, and original research conducted by the Girl Scout Research Institute (GSRI). GSRI’s latest report, *The State of Girls: Unfinished Business*, provides valuable information about key issues and major trends affecting today’s girls and their healthy development.

While we have seen the most success in Oklahoma through partnerships with schools, offering Be a Friend First programs can easily be done through partnerships with schools, community organizations and faith-based partnerships. The cost to provide the program to girls can cost as little as \$45 per girl and can be supported through private and/or governmental funding.



Health Literacy

Marshan Marick, Oklahoma Health Equity Campaign

Defined as the “capacity to obtain, process, and understand basic health information and services in order to make appropriate decisions,” health literacy is a critical issue impacting health outcomes. Research illustrates that nearly half of the U.S. adult population have difficulties understanding and acting on health information (Institute of Medicine [IOM], 2004).

In Oklahoma, more than 49% adults have difficulty reading. The issues surrounding literacy and poor literacy levels are compounded when examining the issue through the lens of the healthcare system. It is the intersection of literacy and health literacy that presents an interesting challenge.

Health literacy moves beyond the basic literacy skills and encompasses higher-ordered skills. Literacy is defined as “using printed and written information to function in society, to achieve one’s goals, and to develop one’s knowledge and potential” (National Assessment of Adult Literacy [NAALS], 2009). This view of literacy moves past the notion of literacy being merely reading and writing, but emphasizes that literacy involves higher level skills as well. Comprehension, reasoning, and problem solving are embedded in literacy and add to troublesome nature of literacy in the U.S.

Literacy in daily life becomes further complicated when we add health literacy into the context. For example, health literacy has been linked with improper use of medications, inappropriate or no use of health services, and poor self-management of chronic diseases. In spite of the implications of low health literacy, the issue has largely been seen as an individual problem.

The Institute of Medicine’s Committee on Health Literacy introduced health literacy as a public health problem in need of multifaceted approaches and solutions (NAALS 2009). Since 1990, there has been acknowledgment that health literacy is

a large component to attaining improved health outcomes and quality health care. There must be recognition that a systematic effort to address health literacy will yield the gains necessary for improved health care quality.

The US healthcare system is changing. There are primary paradigm shifts to focus more on prevention and self-management of diseases. The healthcare system relies on patient engagement and activation, and self-management (particularly of chronic disease) is becoming the norm. With increasing attention being paid to the role of the individual in healthcare, there is still a significant role for organizations and society at large.

Health literacy requires both the participation of the individual and society. Individual elements such as education, culture, and language contribute to the health literacy functioning of an individual, and must be consistent and supported by the social interactions in which the individual engages.

Improving health literacy requires a change in organizational culture and practice. The National Plan to Improve Health Literacy recommends that organizations engaged in the exchange of health information assess and develop organizational plans for addressing and improving health literacy (Department of Health and Human Services [DHHS], 2010). While the recommendation for encouraging organizational change is significant, moving the recommendation into action is necessary for improving the individual and organizational emphasis on health literacy. Requiring a commitment to change through an organized process is necessary for a sustained emphasis on health literacy.

As the nation grapples with ways to improve healthcare quality, there is growing interest in ways to articulate and measure quality. One such measure, patient-centeredness, is care in which the patient is the driver of the health care

process. Kupfer and Bond define patient-centered care as “providing care that is respectful of and representative of individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions” (2012).

Patient-centeredness is important because a primary role is ascribed to the patient, thus shifting the health care dynamic to a system of shared responsibility for health care delivery. A measure of patient-centered care hinges on patient-provider communication. Although there are differences in communication methodologies, there is a link between communication and health outcomes. For example, it is known that poor communication impedes chronic disease self-management.

Therefore, it is essential that the healthcare system looks at ways to improve patient-centeredness and communication efforts. One such approach has been to focus on health literacy.

The link between patient-centeredness and health literacy can be evidenced in the literacy requirements of the educational documents provided to patients. Many educational documents are constructed at a level well above the 9th grade average reading level for U.S. adults (Schwartzberg, 2002).

An analysis of communication techniques utilized by health professionals demonstrated that while 94 percent use simple language as a method for reducing literacy barriers 70 percent rely on printed material to explain health concepts (Schwartzberg, Cowett, VanGeest, & Wolf, (2007). Reliance upon printed material as a main mode of communication of health information may present problems since most health information is written at a reading level above the average U.S. adults’ reading level.

Health literacy is a critical issue in healthcare quality that leads to the achievement of the goals established for the healthcare system to improve health outcomes.

The Oklahoma Health Equity Campaign (OHEC) is dedicated to raising awareness about issues of

health equity and outlining strategies to improve health outcomes for all Oklahomans. To this end, OHEC has developed the “Literacy and Health Equity” position statement highlighting key facts relevant to literacy and its impact on health.

The position statement offers policy recommendations that will enable all of us to “do better.” The policy recommendations include support for both individual and system-level supports. The recommendations articulated by OHEC are embraced by literacy and health literacy advocates alike, and are aligned with the supports necessary for meeting the challenges of the healthcare system. Embracing and advocating for these policies will enable Oklahoma to “Do Better” and improve the health of Oklahomans.

POLICY RECOMMENDATIONS:

GOAL: Oklahomans will possess the literacy skills they need to fully function in their community, workplace, and family. Health literacy efforts must:

Children

- Introduce coordinated school education including health literacy concepts for children enrolled in P- K in Oklahoma public schools.
- Implement Health and Safety education in all OK schools, complying with PASS requirements K-12 with emphasis on health and safety literacy.
- Offer corresponding health and safety literacy education for parents of children enrolled in P- K-12 public schools of Oklahoma.

Adults

- Assure Oklahomans with limited literacy and/or English skills will be aware of the impact improved literacy can have in their workplace, family, health, community, and general welfare.

- Assure individuals with low literacy skills will be aware of literacy resources available in their community including library, community based, and adult education programs.
- Assure local literacy and adult education programs will have the resources they need to meet the needs of the community.

GOAL: Low literate Oklahomans will have access to accurate, easy to read and understandable health information, and will be able to use the information to make informed decisions about their health and medical care. Health literacy efforts must:

Children

- Introduce coordinated school education including health literacy concepts for children enrolled in P- K in Oklahoma public schools
- Implement Health and Safety education in all OK schools, complying with PASS requirements K-12 with emphasis on health and safety literacy
- Offer corresponding health and safety literacy education for parents of children enrolled in P- K-12 public schools of Oklahoma.

ADULTS

- Provide accurate health information in formats suited to adults with limited literacy and English skills.
- Assure local literacy and adult education programs will provide information about health related resources, referral organizations, instructional resources, and health literacy training.

GOAL: Health professionals will have resources available to address barriers to effective patient communication including literacy and English competency. Health literacy efforts must target:

- Continuing education for ALL health professionals

SOURCES

Institute of Medicine. (2004). A Prescription to End Confusion. Washington, DC: National Academies.

Kupfer, J. , Bond, E. (2012). Patient Satisfaction and Patient-Centered Care: Necessary but Not Equal. Journal of the American Medical Association, 308 (2), 139-140.

National Center for Education Statistics. (2009). National Assessment of Adult Literacy. Retrieved from <http://www.nces.ed.gov>. Accessed 3 November, 2012.

Schwartzberg, J. (2002). Low Health Literacy: What Do Your Patients Really Understand? Nursing Economics, 20, 145-147.

Schwartzberg, J., Cowett, A., VanGeest, J., Wolf, M. (2007). Communication Techniques for Patients with Low Health Literacy: A Survey of Physicians, Nurses and Pharmacists. Am J Health Behav, 31, S97-S104.

U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. (2010). National Action Plan to Improve Health Literacy. Retrieved from http://www.health.gov/communication/hlactionplan/pdf/Health_Literacy_Action_Plan.pdf.

Literacy and Health Equity Position Statement, Oklahoma Health Equity Campaign, 2014.

Health and Poverty

Tom Martindale, Coordinator, Building Bridges for the Future, Muskogee

As the Coordinator for Building Bridges for the Future of Muskogee, I'm sometimes asked if our 20 week workshop (Getting Ahead in a Just Getting By World) has had any positive health outcomes for our graduates.

In short, yes it has. Two things are required for health outcomes to improve.

First, the graduates must recognize their overall health as one of eleven resources where they need help and have some degree of control.

Second, the community must address shortfalls identified by the graduates that are contributing to poor health outcomes.

Dental Health

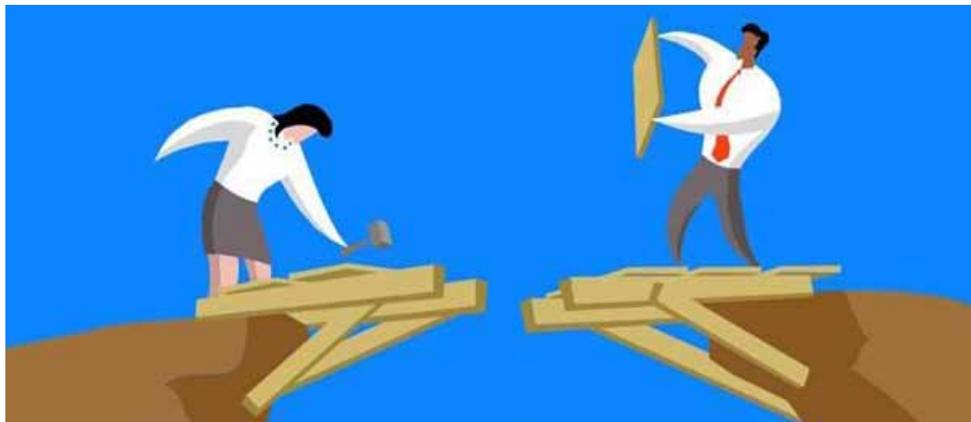
In Muskogee, our first two Getting Ahead (GA) classes identified dental assistance as their major health problem. Lacking the funds to seek private dental care or afford dental insurance, they simply let dental problems escalate to the point where many needed extractions and/or dentures. To address the problem we created a free dental clinic where we have provided assistance to almost one hundred people from the GA and Celebrate Recovery programs. According to the patients, nothing has made such a dramatic improvement to their overall health as the self-confidence and

general appearance they have gained through the dental work. Job interviews are now something they look forward to rather than dread and even their general demeanor has improved dramatically.

Stress

Much research has been done regarding health and healthcare issues that exist in the low income populations and all the studies point to the very high stress levels. Stress has a very high negative impact on overall health in any income group but poverty populations suffer the most. In the work with low income populations, poverty is defined as "access to resources" and it is easy to see how the less able you are to afford healthcare, the worse off your overall health will be. This access is not something a low income person can do anything about in a short time. Local communities and state and federal governments will have to address the issue.

In August, 2014, research will begin with our Muskogee GA graduates, similar to the Ohio State research, which creates conversations with GA graduates and Healthcare regarding how healthcare is perceived by low income individuals and what is needed to address the issues. This research will be conducted by one of the seven people certified nationwide in "Bridges Into Health and Healthcare".



Improving Food Security

Cari Ogden, Regional Food Bank

Quality nutrition is a key component to a healthy life. An estimated 653,820 Oklahomans experienced food insecurity in 2012, including nearly 240,000 children.¹ Food insecurity -- defined by the USDA as a household-level economic and social condition of limited or uncertain access to adequate food -- impacts the physical and mental health of adults, especially more vulnerable populations such as pregnant women and seniors.

Research shows that food insecurity is associated with lower scores on physical and mental health exams,² food-insecure adults have an increased risk of developing diabetes³ and a range of chronic illnesses such as hypertension, hyperlipidemia, and various cardiovascular risk factors.⁴

Studies have also found that for children, food insecurity is associated with health problems that may hinder their ability to function normally and participate fully in school and other activities. Children who are food insecure are more likely to require hospitalization and may be at higher risk for chronic health conditions like anemia, asthma, or oral diseases.^{5,6,7} A lack of access to nutritious and adequate food can lead to obesity and can lead to poor outcomes for behaviors and social skills.⁸ From infancy through adulthood, nutritious food is essential to growth and development.

Food insecurity is more than lacking sufficient amounts of food. It is also often associated with limited access to quality sources of nutrition like fresh fruits and vegetables. Recognizing this, the Regional Food Bank is working to improve our focus on increasing availability of nutritious foods for Oklahomans experiencing hunger and food insecurity. The Regional Food Bank of Oklahoma is the largest private, domestic hunger-relief organization in the state. Last year the Food Bank distributed 47.9 million pounds of food through a network of more than 1,000 partners and schools in



53 central and western Oklahoma counties. Specifically, the Food Bank has increased distribution of fresh produce by more than 240% since 2008, including special focus on increased access to fresh food in children and senior outreach programs, as well as assistance to community gardens through distribution of seedlings and seed packets to partner programs.

A fresh food mobile pantry program was developed in 2012, serving residents in low-income neighborhoods.

In 2014, a healthy living pantry box program was organized in partnership with the Oklahoma City County Health Department on the campus of the Northeast Regional Health and Wellness Center, where specialized healthy food boxes are prescribed to clients under the supervision of physicians at the OU Physicians Community Health Clinic. The pantry boxes provide food for patients with diabetes, heart disease, and related conditions.

Initiatives to improve the health of food-insecure Oklahomans must include increasing access to food, improving the quality and nutritious mix of food available to food insecure families, and increasing the amount of food available for distribution through a network of charitable programs. These are all major areas of focus for the Regional Food Bank. But as Oklahoma continues to rank 44th among the states in terms of overall health outcomes,⁹ partnerships between public and private sectors must be established to meet immediate health needs as well as long-term access issues faced by food-insecure families.

Lack of access to nutritious food often involves issues of physical proximity. In Oklahoma, 43 of 77 counties contain census tracts identified as food deserts (in many of these counties, all or nearly all



of the county area resides within a food desert), meaning substantial numbers of residents must travel more than 10 miles to reach a full service grocery store in rural areas and more than a mile to a grocery store in urban areas.¹⁰ The Regional Food Bank is addressing issues of physical proximity to healthy foods and the need to increase the amount of food available through establishing Food Resource Centers in key communities across its service area. Food Resource Centers serve as both client-choice pantries modeled after full service grocery stores as well as community hubs for assisting seniors and families with accessing other resources to increase family stability.

However, efforts by private charitable organizations alone cannot begin to address complex issues faced by individuals and communities existing in areas with limited fresh food access. Community leaders, businesses and lawmakers must be made aware of the need for improved access to nutritious food and work together to find innovative ways to establish stronger connections within Oklahoma's food system between producers, consumers, and retailers. This includes bolstering support and improving strategies for programs like Healthy Corner Store initiatives, which aim to improve access to affordable, nutritious options for shoppers

at convenience stores and smaller markets. Oklahoma can also benefit from the expansion of Oklahoma's Farm to School program, which connects locally grown produce with school cafeterias, as well as promotes nutrition education, cooking demonstrations, and related workshops for the purpose of contributing to children's health by helping students develop healthy eating habits that will last a lifetime. Considering that Oklahoma still imports over 90 percent of its fresh produce, improving programs like Farm to School not only promotes health education and food security for Oklahoma students, but it also increases connections in local agriculture and supports the improvement of Oklahoma's overall food economy.¹¹

Increasing access to healthy food also includes improving access to federal child nutrition programs operating in Oklahoma's education system and charitable organizations. Currently more than 62 percent, or 352,618 children enrolled in Oklahoma public schools are eligible for income-based participation in national school breakfast and lunch programs, and there is room for improved participation.¹² School districts should be encouraged to take advantage of the Community Eligibility Provision (CEP), which provides an

alternative approach for offering school meals in low-income areas. With this provision, schools that predominantly serve low-income children can offer free meals to *all students* through the National School Lunch and School Breakfast Programs, instead of collecting individual applications for free and reduced-price meals.

When school is out of session for the summer, limited nutritious options present a dangerous situation for thousands of students. Oklahoma remains *last* in the nation in participation in the Summer Food Service Program (SFSP).¹³ As one of the state's largest sponsors of the Summer Food Service Program, the Regional Food Bank has increased its sponsorship of summer feeding sites by 57% since 2011. However, 17 counties currently operate no SFSP and many counties have limited opportunities for children to receive meals through the program.¹⁴

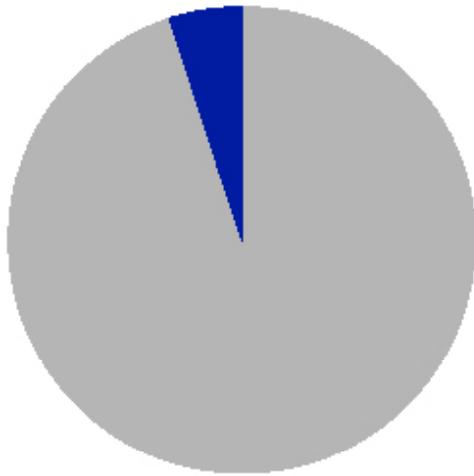
Recommended improvements to the program include advocating for the elimination of the requirement that meals be consumed onsite and easing the administration of the program for school districts by promoting opportunities such as the USDA's Seamless Summer Program. With this program, schools apply to operate the Seamless Summer Option through the National School Lunch (NSLP) or School Breakfast Programs (SBP) and continue to use the same meal service rules and claiming procedures used during the regular school year. This is a streamlined approach to feeding hungry children in communities throughout Oklahoma.¹⁵

Research identifying hunger's impact on crucial health outcomes in comparison with Oklahoma's poor health indicators and occurrence of food insecurity make it clear that Oklahoma must take a serious look at issues affecting access, education, and affordability of nutritious food. Food insecurity is a persistent barrier for thousands of Oklahomans striving to achieve family stability and an improved quality of life, but it is not an insurmountable hurdle; focused partnerships alongside the leadership of Oklahoma lawmakers can make Oklahoma a healthier, hunger-free state.

REFERENCES

- 1 <http://feedingamerica.org/hunger-in-america/hunger-studies/map-the-meal-gap.aspx>
- 2 Stuff, Casey, Szeto, Gossett, Robbins, Simpson, Connell, and Bogle (2004) Household Food Insecurity Is Associated with Adult Health Status. *Journal of Nutrition*, 134, 2330-2335.
- 3 Seligman, Bindman, Vittinghoff, Kanaya, and Kushel (2007) Food Insecurity is Associated with Diabetes Mellitus: Results from the National Health Examination and Nutritional Examination Survey 1999-2002. *Journal of General Internal Medicine*, 22, 1018-1023.
- 4 Seligman, Laraia, and Kushel (2009) Food Insecurity Is Associated with Chronic Disease among Low-Income NHANES Participants. *Journal of Nutrition*, 140, 304-310.
- 5 Cook, Frank, Leveson, Neault, Heeren, Black, Berkowitz, Casey, Meyers, Cutts, and Chilton (2006) Child food insecurity increases risks posed by household food insecurity to young children's health. *Journal of Nutrition*, 136, 1073-1076.
- 6 Kirkpatrick, McIntyre, and Potestio (2010) Child hunger and long-term adverse consequences for health. *Archives of Pediatric Adolescent Medicine*, 164 (8), 754-762.
- 7 Eicher-Miller, Mason, Weaver, McCabe, and Boushey (2009) Food Insecurity is associated with iron deficiency anemia in US adolescents. *American Journal of Clinical Nutrition*, 90, 1358-1371.
- 8 Casey, P.H., Szeto, K.L., Robbins, J.M., Stuff, J.E., Connell, C., Gossett, J.M., & Simpson, P.M. (2005). Child health-related quality of life and household food security. *Archives Pediatric and Adolescent Medicine*, 15, 51-56.
- 9 <http://cdnfiles.americashealthrankings.org/SiteFiles/Reports/AnnualReport2013-r.pdf>
- 10 <http://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas.aspx>
- 11 <http://www.okfarmtoschool.com/f2s-overview.htm>
- 12 Oklahoma State Department of Education, Low Income Report, 2013-2014.
- 13 http://frac.org/pdf/2013_summer_nutrition_report.pdf
- 14 Oklahoma State Department of Education, Summer Food Service Program, 2014.
- 15 <http://www.fns.usda.gov/school-meals/opportunity-schools>

Section 12
ENVIRONMENT



Health Impact Assessment

John Tankard, City of Oklahoma City Planning Department, Oklahoma Health Equity Campaign

PLANOKC (planokc) is the new comprehensive plan for Oklahoma City. In order to determine how the city will grow, many techniques were utilized including public input, scientific analysis, a housing market study, a retail study, and more. Potential consequences regarding the health of Oklahoma City citizens were evaluated by an in-house Health Impact Assessment (HIA). The main purpose of the HIA was to compare three different possible futures, each with a different development pattern and distribution of population and jobs throughout the city.

Planning department staff and a steering committee of community members selected 35 health indicators for analysis as a part of this HIA. The topics included:

1. Land use (2 indicators)
2. Transportation (6 indicators)
3. Environmental and Natural Resources (8 indicators)
4. Communities (6 indicators)
5. Preservation, Appearance, and Culture (2 indicators)
6. Parks and Recreation (3 indicators)
7. Economic Development (3 indicators)
8. Public Services (5 indicators)

Five main themes arose through the HIA analysis of existing conditions and the comparison of the three potential development growth scenarios from planOKC:

1 Active Transportation Options

An increase in transit, bicycle, and pedestrian infrastructure can benefit the community in many ways related to public health, including reduced risk of heart disease, decreases in obesity rates and diabetes, and more.

Scenario C provides the greatest opportunity to have the most people with access to active transportation options.

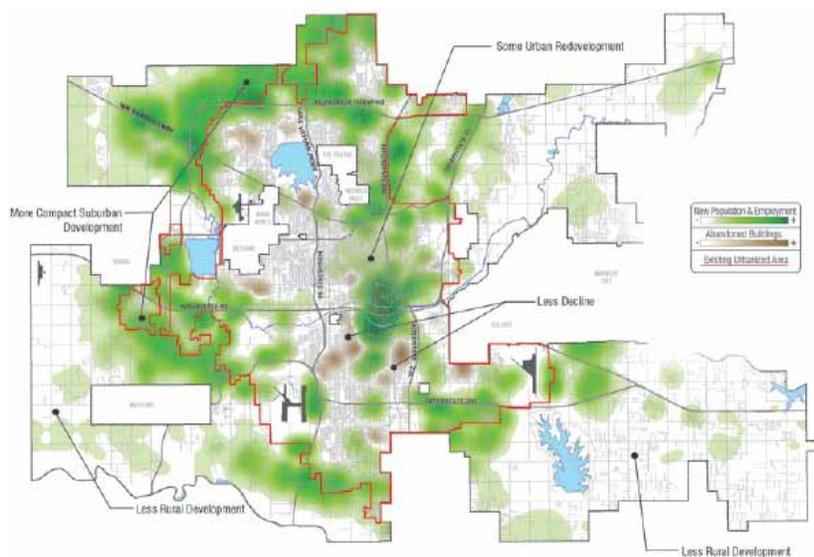
2 Mix of Uses

Diversity of land use types makes it more possible for a single area in the city to be sufficiently capable of meeting residents' needs. This cuts down on driving, which will improve air and water quality, which leads to better health outcomes.

Scenario C has the densest mix of uses, which would be accessible at a walkable and bikable distance. Scenario B and A are better suited for motor vehicle travel.

3 Proximity to Daily Needs

Living in proximity to recreation opportunities, healthy foods, health care facilities, schools, and other facilities reduces the amount of time and distance needed to accomplish daily tasks. This provides people with greater time to spend with their family and communities, as well as lowering the amount of driving that occurs, which improves health outcomes for people and the environment.



Scenario C overwhelmingly located the greatest number of residents within a close proximity of their daily needs.

4 Equitable Living Choices

A diverse mix of housing types and values will allow for more people to afford their standard of living. This leads to stronger families that have money for healthful choices.

Scenario B and Scenario C had much more affordable housing for a diverse cross-section of the Oklahoma City population than Scenario A.

5 Regulation of Pollution

Taking care of the air, soil, water bodies, vegetation, noise levels and light levels in the city will ensure that healthy living is an available choice, not constrained by reckless practices.

Scenario C had the least negative impact on the environment of the three scenarios due to the smallest addition of impervious surfaces, and the least reduction of farmland, forested areas, and natural habitats.

The HIA and Other Municipalities

The beauty of the Health Impact Assessment is its scalable nature. The tools and methodologies that are useful for a project like a new streetcar line being placed in a downtown area are also

useful when looking at the impact of a new comprehensive plan for an area greater than 600 sq. miles, like Oklahoma City. But HIAs are not limited specifically to urban design; they can be used for evaluating policies for schools, criminal justice programs, immigration reform – basically any change that could have an impact on health.

While the HIA for the comprehensive plan made many policy recommendations specific to Oklahoma City, and those that could be utilized in a more far-reaching capacity, the process has led to a few meta-recommendations directed at other projects and municipalities:

1. Conduct a health impact assessment for all development projects, regardless of scale.
2. Municipalities should include a health-impact assessment with all of their large scale planning efforts.
3. Any large policy changes should utilize a health impact assessment to refine content such that health is not neglected.

Reference Documents:

1. *planokc Health Impact Assessment, 2014*
2. *planokc Health Impact Assessment Summary, 2014*



Homelessness Costs A Lot

Governor's Interagency Council on Homelessness

The Governor's Interagency Council on Homelessness (GICH) is comprised of members appointed by the Governor from a consortium of representatives from the Governor's Office, State agencies, community organizations, non-profit agencies and local governments. Established in 2004, the GICH has worked closely with State agencies and local Continuum of Care groups to meet common goals such as: promoting collaborations among stakeholders; developing and implementing strategies to improve access to services and mainstream resources; receiving federal and state benefits and developing affordable, permanent housing.

The GICH voted to support the Oklahoma Health Equity Campaign "Health Equity" Position Statement which states Health Equity is when everyone has the opportunity to "attain their full health potential" and no one is disadvantaged because of their social position or other socially determined circumstance.¹⁵

The homeless in Oklahoma face chronic, serious health problems that remain unaddressed by policy makers. For example, homeless individuals are far more likely to suffer from a stroke, diabetes, high blood pressure, asthma, or cancer than a housed individual. Living on the street or in crowded homeless shelters is personally stressful, exacerbating any existing medical condition, and risks exposure to new medical problems such as communicable diseases, violence, malnutrition and harmful weather.

According to the U.S. Department of Health and Human Services, chronic homelessness is also associated with mental illness and chemical

dependency. In January, 2010, 26% of shelter populations were found to have a severe mental illness and 35% had a substance use disorder, often co-occurring.¹ Finally, the homeless are more likely to live 30 years less than those who are housed.²

The primary reason for this perpetuation of chronic health problems for the homeless is a lack of affordable health care. Homelessness is typically associated with extreme poverty. Oklahoma's below poverty level is at 16.6% (2013 estimate) which ranks higher than the national average of 14.9% (census).³ Homeless individuals cannot afford to purchase health insurance.

There are two significant consequences for the state of Oklahoma should the homeless continue to remain uninsured. First, communities and taxpayers will continue to pay the bill for emergency medical services for homeless individuals. Researchers at San Diego State University tracked 15 chronically homeless in San Diego for 18 months and determined the annual community cost for emergency medical service was \$65,600 per person. While the homelessness costs to Oklahoma communities have not been extensively studied, the preliminary analysis of costs indicate that the lack of health care resources is a major piece missing for the needs of those who are homeless.⁴

There are two Oklahoma studies that have detailed the costs of homelessness on their community. Both studies reinforce the effectiveness of engaging and housing chronically homeless individuals with appropriate supports. Even though the examples below are set in urban communities, we can extrapolate that the issues and costs in rural areas would be exponentially worse due to the lack of resources.

The City of Tulsa completed an in-depth report in 2007 detailing the costs of providing permanent supportive housing for chronically homeless

individuals as compared to leaving those individuals on the street, in emergency shelters or in transitional housing.

The analysis of costs indicated that providing permanent supportive housing was significantly less expensive than any other form of housing or being without housing.⁵

The City of Oklahoma City conducted a yearlong study in 2009-10 to determine how much is spent on services for the homeless population in Oklahoma City by both public and private entities. More than 40 agencies and organizations contributed data. Key findings include the following⁶:

- The total cost of homelessness was \$28,746,094.
- Emergency shelters and hospital emergency rooms combined accounted for more than 50% of the overall costs.
- The cost of law enforcement (county jail and police) and first response (fire and Emergency Medical Services Authority) was \$2,581,252.
- One chronically homeless man cost more than \$160,000 during the one-year study period in emergency room visits, jail and police interactions, and EMSA transports. He was not served in the homeless system during that time.
- 59% of the dollars that were spent came from private sources (individuals, foundations, hospitals, faith-based organizations, United Way, etc.), and 41% came from public sources (federal, state and local government).

Second, lack of health care will continue to perpetuate the cycle of homelessness. Illness in a family can lead to unpaid medical bills which can lead to unemployment and homelessness. Nationally, of the 1 million personal bankruptcies in 2007, 62% were caused by medical debt.⁷



In these situations, any savings accumulated are quickly exhausted and relying on friends and family for assistance to help maintain rent/

mortgage payments, food, medical care, and other basic needs can be short-lived. Outstanding medical bills can in fact, throw families into homelessness or continue the cycle for those who already are.

After an Overall 49th ranking by United Health Foundation⁸, the Oklahoma Legislature passed a law in 2008 requiring the State Board of Health to develop a comprehensive health improvement plan. In this 5 year plan dated 2010 – 2014⁹, under “Access to Care”, the report lists the following strategies to be listed as State initiatives under the Infrastructure Goal of “Access to Care:”

- *Expand Insure Oklahoma and Sooner Care*
- *Create affordable commercial health plans*
- *Generate revenue through a dedicated insurance fee*
- *Encourage Oklahoman's to obtain insurance coverage*
- *Pursue Complementary initiatives*

This same report lists under Legislation and Policies; “Develop and initiate appropriate policies and legislation to maximize opportunities for all Oklahomans to lead healthy lives.”¹⁰

As of 2013, in America’s Health Rankings, Oklahoma ranked 44th in overall health issues.¹¹ Although it is a slight improvement, it is not enough. If chronic health problems in the homeless population were addressed, we could raise this ranking up much higher. Funding that was once available to assist this effort has been greatly reduced in the past few years.

For example, state spending for uncompensated care will be reduced as much as 50% or \$26 - \$52 million dollars¹². In the past 2 years, public health funding decreased by 40% from \$113 to \$80 per person¹³. In the past 5 years, the rate of preventable hospitalizations decreased from 95.9 to 76.9 discharges per 1,000 Medicare enrollees.¹⁴

Secure Housing: A Prescription for Health

Gregory A. Shinn, MSW, Associate Director, Mental Health Association Oklahoma

Years ago, the psychologist, Abraham Maslow, proposed his theory that stated that safe and secure shelter was basic in the “hierarchy of human needs” and must be satisfied before we can otherwise better ourselves. More recently, Dr. Thomas Frieden, the current Director of the Center for Disease Control and Prevention, pointed out evidence that shows that socioeconomic factors, including the availability of affordable housing, are “...the largest impact factors..” affecting health in the US population.

For more than 20 years, Mental Health Association Oklahoma’s recovery programs in Tulsa have worked among the longest-term disabled homeless population through the agency’s nationally recognized Housing First model. Our 1,200 Tulsans, many of whom are impacted by mental illnesses, substance abuse, have histories of homelessness and incarceration, are transitional-age youth, and/or living in poverty with multiple chronic medical illnesses are housed in one of our 23 apartment complexes.

We connect residents with a variety of programs and partnerships to provide supportive services that address their higher levels of needs. The ultimate goal for each resident in-need is to achieve greater self-sufficiency and reintegration into the fabric of our community.

In 2013, 88% of our formerly homeless tenants did not return to homelessness. And for six years in a row, Tulsa has had less than 100 citizens experiencing chronic homelessness on the streets or in the shelters. In 2012, the City of Tulsa ranked No. 2 in the nation in the percentage of chronically homeless people moving into permanent housing.

Not only has the Housing First model been successfully replicated in Tulsa and Oklahoma City but also in more than 40 communities across the United States as well as in Canada, Japan, the

Netherlands, Spain, and Portugal. Studies show that developing affordable permanent, supportive housing options reduces homelessness, expensive emergency room visits, cuts down on police and ambulance calls and saves millions of taxpayer dollars over time, thus improving the quality of life for everyone. It is actually cheaper to provide an affordable apartment to someone who is formerly homeless than it is to put someone living on the streets in a shelter, in jail or in a crisis bed at the hospital according to the research.

Overall, it has been shown that affordable housing has an excellent return on investment through higher employment and other economic measures, all of which is in addition to the cost savings of public dollars. One of the other many benefits of our housing and recovery programs is that we preserve affordable housing stock when there is a critical shortage of safe and affordable apartments and homes not only in Tulsa but across Oklahoma.

Oklahoma and 46 other states have housing trust funds. Housing trust funds allow developers to leverage other public and private funding sources to build or rehabilitate housing, and even provide services needed by tenants.

The Oklahoma Housing Trust Fund, while effective with what it has, is limited in its impact because the Fund has never been fully capitalized and it operates only as a “revolving loan” fund for developers alone. It is our recommendation that the Trust Fund have a \$5 million annual and recurring appropriation for not only loans but also grants to be awarded to private developers, non-profits, and public entities to stimulate multiple housing projects across Oklahoma in order to meet the needs for affordable housing.

Housing - it’s a prescription for personal well-being and Oklahoma’s healthy economy.

Public Transportation and the Public's Health

Oklahoma Health Equity Campaign

Please see our Health Equity Position Statement ¹ elsewhere in this book. Public transportation supports healthy communities directly by ...

- allowing people to get daily exercise by walking or biking to transit stops,
- reducing air pollution and pollution-related respiratory ailments, like asthma;
- providing access to jobs which is crucial to long term health especially for those without a car;
- organizing and sponsoring health fairs.

Public transportation supports healthy communities indirectly when people take the bus, bike, etc.

- there is less traffic and stress for those who drive reducing road rage, long commutes, and traffic jams; and
- boosting mental health by building a sense of community cohesion and connection to other riders and neighbors.

Public transportation can provide access to healthy community resources such as ...

- life-sustaining medical treatments and doctor's appointments; healthy food outlets like grocery stores and farmers' markets; and
- places for play and being physically active, such as parks and walking/biking trails.

Transportation is a Public Health Issue

In fact, the first Health Impact Assessment (HIA) in the state was completed in 2013 regarding Oklahoma City's planned streetcar. Streetcar can improve various health issues. Oklahomans face a number of chronic health problems such as obesity, heart disease and diabetes. In fact, Oklahoma ranks

43rd among all states for overall health according to the United Health Foundation.² Stress and lack of exercise contribute to our poor health. One way to counter these problems is by using and investing in public transportation. Public transportation is linked to many aspects of good health – access to food, education/training, safety, exercise, lower stress levels, healthcare access, and employment.

The public transportation system is especially important to those who want to drive less, and to households without automobiles, the elderly, and those unable to drive. For these people, transit is the lifeline to medical care, grocery stores, employment, recreation, and everyday activities that others take for granted. Many suffer negative health consequences from lack of access to these basic necessities when public transportation isn't affordable or available. Public transportation also plays an increasing role in the daily lives of many commuters, students, urban dwellers, and even rural residents.

Given the opportunity to get around without a car, many find the advantages of lower stress, more exercise, and pedestrian-oriented communities to outweigh the benefits associated with the traditional car-dependent culture. Transit helps many households save part of the \$8,293 or more annual cost of a car,³ and thus better afford health insurance, dental care, good diet, housing, and even health club memberships.

How We Stack Up

Metro Tulsa and Oklahoma City are only able to provide relatively infrequent transit service when compared with American metropolitan areas of similar size. Transit in suburban and rural areas is no better off, especially for travel between cities. Yet the state's urban road and highway systems provide a relatively high "level of service" compared to American cities of similar size. This relative inequality of road/transit service levels illustrates the need for increased transit funding.

Transit in Oklahoma's urban areas is definitely underfunded when compared to similar-size cities in our region. Oklahoma City and Tulsa operate on less than one-third the amount of local funding typical for metros of their size according to the National Transit Database.^{4,5,6}

The lack of transit funding is not solved by increasing fares: the best bus and rail systems in America tend to receive less than 15% of costs back through the farebox collections.⁴ Adequate funding means a dedicated funding source and most comparable-size cities outside Oklahoma have that, usually through a transit-dedicated sales tax of at least a half cent.

A recent summer 2010 Transit Equity Network national report found that nearby metropolitan cities like Kansas City, St. Louis and Denver had a modest average of 20% of their federal transportation funds allocated to public transportation.⁴ In the Oklahoma City metropolitan area, available federal funds were just under 10% according to the Transportation Improvement Program for the Oklahoma City Area Regional Transportation System, FY 2011-2014.⁷

The Solution

Both Oklahoma City and Tulsa metropolitan areas need a dedicated local funding source. More state funds are needed for urban and rural transit. Bus, streetcar, ADA paratransit, senior van, discount senior taxi ride, bike and bus, commuter express bus, bus rapid transit, commuter rail transit, and other rail, are all part of transit's contribution to better health. The Oklahoma Health Equity Campaign, Turning Point Partnerships across the state, and other groups including AARP Oklahoma, the county health departments, Oklahoma Alliance for Public Transportation (APT), and EMBARK, -, recognize the connections of health and transit.

SOURCES

1. Health Equity Position Statement Oklahoma Health Equity Campaign, 2014.
2. United Health Foundation (2012). United States Overview: Oklahoma 2012. Retrieved from: www.americashealthrankings.org/ok/2012
3. Bureau of Labor Statistics. Consumer Expenditures 2011 News Release. Retrieved from: www.bls.gov/news.release/pdf/censan.pdf
4. METRO Transit (2009). Transit Funding. Retrieved from: <http://www.gometro.org/transit-funding>
5. National Transit Program (2011). Central Oklahoma Transportation and Parking Authority: Oklahoma City. Retrieved from: http://www.ntdprogram.gov/ntdprogram/pubs/profiles/2011/agency_profiles/6017.pdf
6. National Transit Program (2011). Metropolitan Tulsa Transit Authority (MTTA): Tulsa. Retrieved from: www.ntdprogram.gov/ntdprogram/pubs/profiles/2011/agency_profiles/6018.pdf.
7. Association for Central Oklahoma Governments (2010). Retrieved from: http://www.okladot.state.ok.us/p-r-div/stip/stip_ffy2011-2014_acogov.pdf

These groups, along with others, are joining in the call for adequate funding for public transit.

POLICY RECOMMENDATIONS

Goal: Increase access to healthcare and jobs through reliable, low-cost public transit

- Provide adequate funding for a first-class transit system through dedicated state and local funding
- Add night service and increase both the daytime coverage area and route frequencies of public transit systems
- Connect rural and outlying communities with timely, affordable public transit

Goal: Build healthy cities and communities that give people cleaner, safer options for active transportation.

- Encourage "green" development and pedestrian-friendly planning
- Discourage sprawl, and invest in enhancing our existing communities through infill development
- Create "complete streets" that serve all users by incorporating safe sidewalks, proper bus stops, bike lanes, and crosswalks in design and construction
- Provide safe crossings and sidewalks near transit stops

CONCLUSION

Better transportation is about choices. Better health is often about equitable transportation choices.

Academy Town Halls

- 2014 -Health: We Can Do Better
- 2013 - Moving Oklahoma: Transportation Infrastructure
- 2012 - Where In The World is Oklahoma?
- 2011 - Developing the Oklahoma Economy
- 2010 - Municipal Governments in Oklahoma
- 2010 - Water Planning for Oklahoma
- 2009 - Getting Ready for Work: Education Systems and Future Workforce
- 2008 - Oklahoma's Criminal Justice System: Can We be Just as Tough but Twice as Smart
- 2007 - Building Alliances: Tribal Governments, State & Local Governments and Private Sectors
- 2006 - Strategies for Oklahoma's Future
- 2005 - Drugs: Legal, Illegal...Otherwise
- 2004 - Oklahoma's Environment: Pursuing a Responsible Balance
- 2003 - Oklahoma Resources: Energy & Water
- 2002 - The State of Oklahoma Health
- 2001 - Competing in an Innovative World

Academy Conferences

- 2000 - The Oklahoma Constitution: Back to the Future
- 1999 - Technology and Oklahoma's Future: Lighting the Fuse
- 1998 - Technology Applications: Accelerating Toward Prosperity
- 1997 - Education and Training: The Key to a Richer Oklahoma
- 1996 - Crime: Building Safer Communities
- 1995 - Restructuring State, County and Local Government
- 1994 - Entrepreneurial and Small Business Development: Future Economic Growth
- 1993 - Today's Budget Decisions, Tomorrow's Priorities
- 1992 - Oklahoma: Mind Your Own Politics: What Should Oklahoma's Policies Be?
- 1990 - Oklahoma's Future: Choice or Chance?
- 1989 - Oklahoma's Future: Developing our Human Potential
- 1988 - Elementary and Secondary Education: Will Oklahoma Pass or Fail
- 1987 - The Future of Oklahoma
- 1986 - Strategy for Economic Expansion in Oklahoma
- 1985 - Economic Development in Oklahoma

Moving Ideas Into Action

The Oklahoma Academy, 411 West Main Street, Suite 390, Norman, OK 73069
405.307.0986 (phone) 405.307.0947 (fax) Email: jennifer@okacademy.org



Moving Ideas Into Action

The Oklahoma Academy, 411 West Main Street, Suite 390, Norman, OK 73069
405.307.0986 (phone) 405.307.0947 (fax) Email: jennifer@okacademy.org

Premier Sponsor



*the
Chickasaw
Nation*

Town Hall Silver Sponsors



Friends of the Academy

Bronze Sponsors

BancFirst
Conner and Winters
Oklahoma State University
St. John Health System

Student Sponsor

USAO, Chickasha

General Sponsor

Chapman Foundation

Student Sponsor

Foundation Management, Inc.