

HELP Webinar:
April 5, 2017, 1:00pm

Community Health Workers: The Missing Link in Population Health

Presented by:

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Director

University of Kentucky Center of Excellence in Rural Health

Objectives

- Introduction
- History
- Definition of CHW
- Why we need CHWs?
- Where are CHWs in the health care system?
- Today's CHW
- Future CHWs

Introduction

- Communities are increasingly challenged with rising health care costs, chronic disease management and addressing provider shortages. As a result, it is critical to find innovative ways to improve the health of communities.
- Community Health Workers (CHWs) are a cost effective bridge between patients with the greatest needs and the primary care physicians and other health care providers.
- Because CHWs know their community and are more likely to be trusted, they are able to address the health disparities and special needs. This webinar will explore the strengths of the CHWs and ways they can be added to a team to more effectively address the needs of the community.

Discovering the Missing Link

History of CHWs



Image: Bazaar Voice Blog

Discovering the Missing Link

History of CHWs

- “The use of community health workers has been identified as one strategy to address the growing shortage of health workers, particularly in low-income countries.
- Using community members to render certain basic health services to the communities they come from is a concept that has been around for at least 50 years. (1966)
- There have been innumerable experiences throughout the world with programs ranging from largescale, national programs to small-scale, community-based initiatives”.

[Source:](#)

Discovering the Missing Link

History of CHWs

- In an article written by Henry Perry (September 18, 2013) he identifies the first CHWs as “Farmer Scholars”. They trained in China in the 1930s. These CHWs were considered the forerunners of the Barefoot Doctors.
- The World Health Organization stated, “CHWs, a key to health care’s success”. (1975)
- “Community Health Workers — A Local Solution to a Global Problem” (September 5, 2013)

[Source:](#)

Definition: Community Health Workers

- A Community Health Worker, (CHW) is a frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served.
- This trusting relationship enables the CHW to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery.
- A CHW also builds individual and community capacity by increasing health knowledge and self-sufficiency through a range of activities such as outreach, community education, informal counseling, social support, and advocacy.¹[p.1]

[Source:](#)

Definition: Community Health Workers

CHWs do NOT provide clinical care and generally do NOT hold another professional license; their expertise is based on shared life experience (and often culture) with the people they serve.



Improving Health Outcomes

The provision of culturally tailored health care can reduce disparities among patient populations and reduce problems associated with linguistic barriers.

The concept of cultural competency has a positive effect on patient care delivery by enabling providers to deliver services that are respectful of and responsive to the health beliefs, practices and cultural and linguistic needs of diverse patients.

[Source:](#)

CHWs work within Health Care Systems

- Extensions of the hospital system
- Community based
- Preventative health
- Mental health
- Primary Care
- Health Departments
- Federally Qualified Health Care Centers
- Rural Health Clinics

Rural Challenges

- Nearly one in four Americans— 70 million people—live in rural areas. On average, they are older, poorer, more likely to be uninsured, and suffer from higher rates of chronic health conditions than others.
- Although nearly 25 percent of Americans live in rural areas, only about 10 percent of physicians practice there.

[Source:](#)

Readmission Costs Even Higher Than Suspected

by Greg Reid | February 9, 2012

“WASHINGTON – A new study on the cost of hospital readmissions finds that about 1 in 12 adults discharged from a hospital is readmitted within 30 days, adding \$16 billion to the cost of healthcare in the United States, and, according to analysts, it underscores the need for a comprehensive approach to reforms.

The study, authored by Anna Sommers and Peter J. Cunningham for the National Institute for Health Care Reform, said the costs of readmission grow to \$97 billion annually when including those patients readmitted within one year.”

[Source:](#)

Number of deaths for leading causes of death

Cause of Death	Number of Deaths
Heart disease	614,348
Cancer	591,699
Chronic lower respiratory diseases	147,101
Accidents (unintentional injuries)	136,053
Stroke (cerebrovascular diseases)	133,103
Alzheimer's disease	93,541
Diabetes	76,488
Influenza and pneumonia	55,227
Nephritis, nephrotic syndrome, and nephrosis	48,146
Intentional self-harm (suicide)	42,773

[Source:](#)

Overview of the Chronic Disease Burden

- 145 million people, or almost half of all Americans, live with a chronic condition
- That number is projected to increase by more than one percent per year by 2030, resulting in an estimated chronically ill population of 171 million
- Almost half of all people with chronic illness have multiple conditions. As a result, many managed care and integrated delivery systems have taken a great interest in correcting the many deficiencies in current management of diseases such as diabetes, heart disease, depression, asthma and others.

[Source:](#)

Those deficiencies include:

- Rushed practitioners not following established practice guidelines
- Lack of care coordination
- Lack of active follow-up to ensure the best outcomes
- Patients inadequately trained to manage their illnesses

[Source:](#)

Why CHWs?

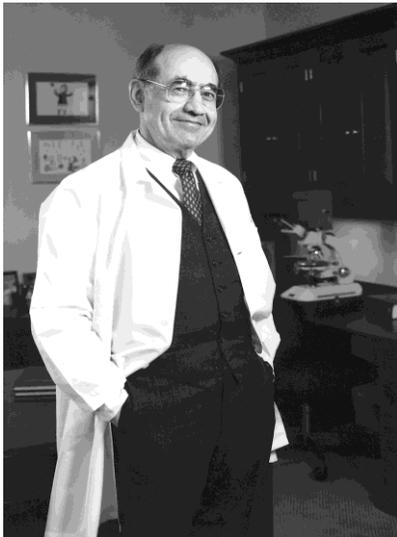
Barriers to Health Care

- Access to the Health Care System
- Lack of Understanding of How to Navigate the Health Care System
- Uninsured/Underinsured/Underserved
- Transportation
- Access to Primary Provider
- Access to Medications
- Health Literacy
- Education on Illness
- Communication (culture)
- Social Determinates of Health

Kentucky discovered the Missing Link...Our CHWs

In the early 1990's many rural Kentuckians were going without health care services, and in particular, preventive care.

The Commonwealth's General Assembly took the unique step in 1994 of earmarking taxpayer money for Kentucky Homeplace.



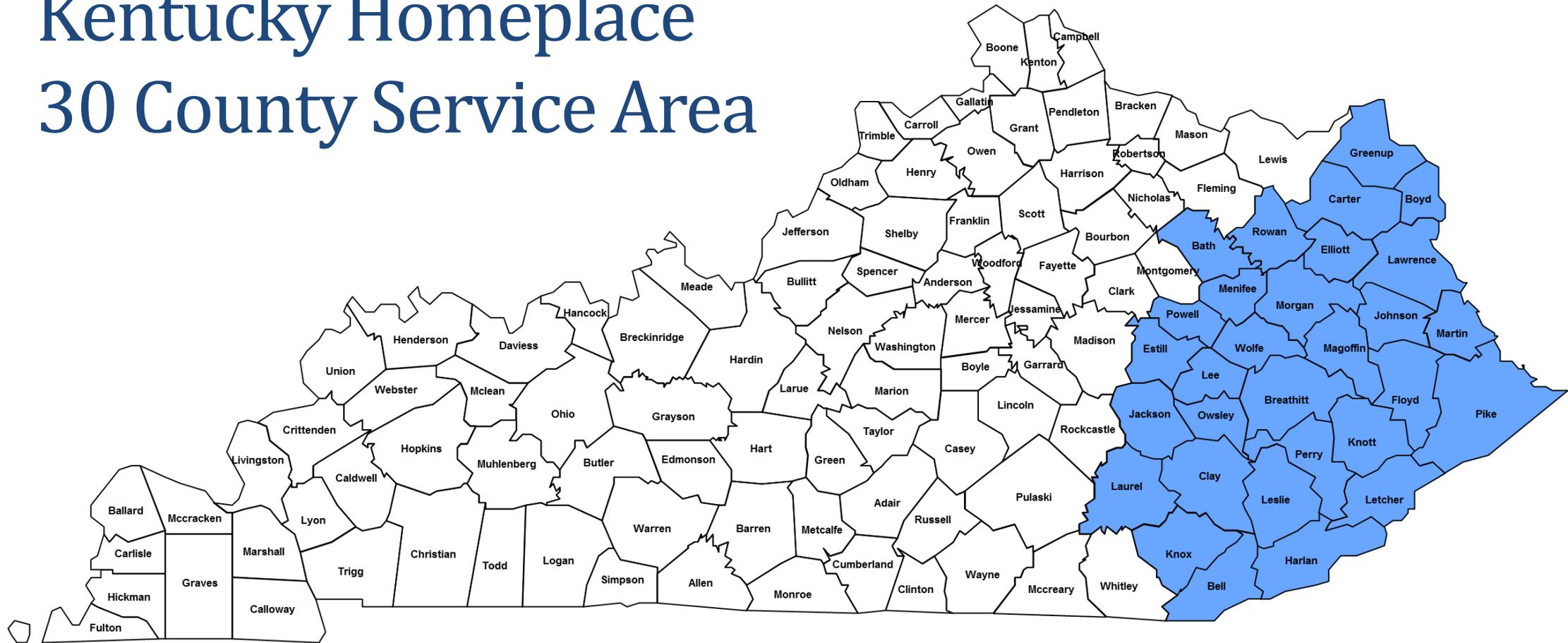
Kentucky Homeplace: A Successful Model

Mission: Provide access to medical, social, and environmental services for the citizens of the Commonwealth

Vision: Educate Kentuckians to identify risk factors and use preventative measures to become a healthier people with knowledge and skills to access the healthcare and social systems



Kentucky Homeplace 30 County Service Area



Central Office
Mace Baker, Director
750 Morton Blvd., Hazard, KY 41701
855-859-2374



Kentucky Homeplace: A Successful Model

	Fiscal Year July 2015 – June 2016	Combined Totals July 2001 – June 2016
Clients Serviced	4,637	152,262
Services Provided	99,645	4,748,727
Services and Medication Value	\$7,780,339	\$308,335,241
Return on Investment (ROI)	\$5.98	\$11.55

Building on Kentucky Homeplace: A Successful Model

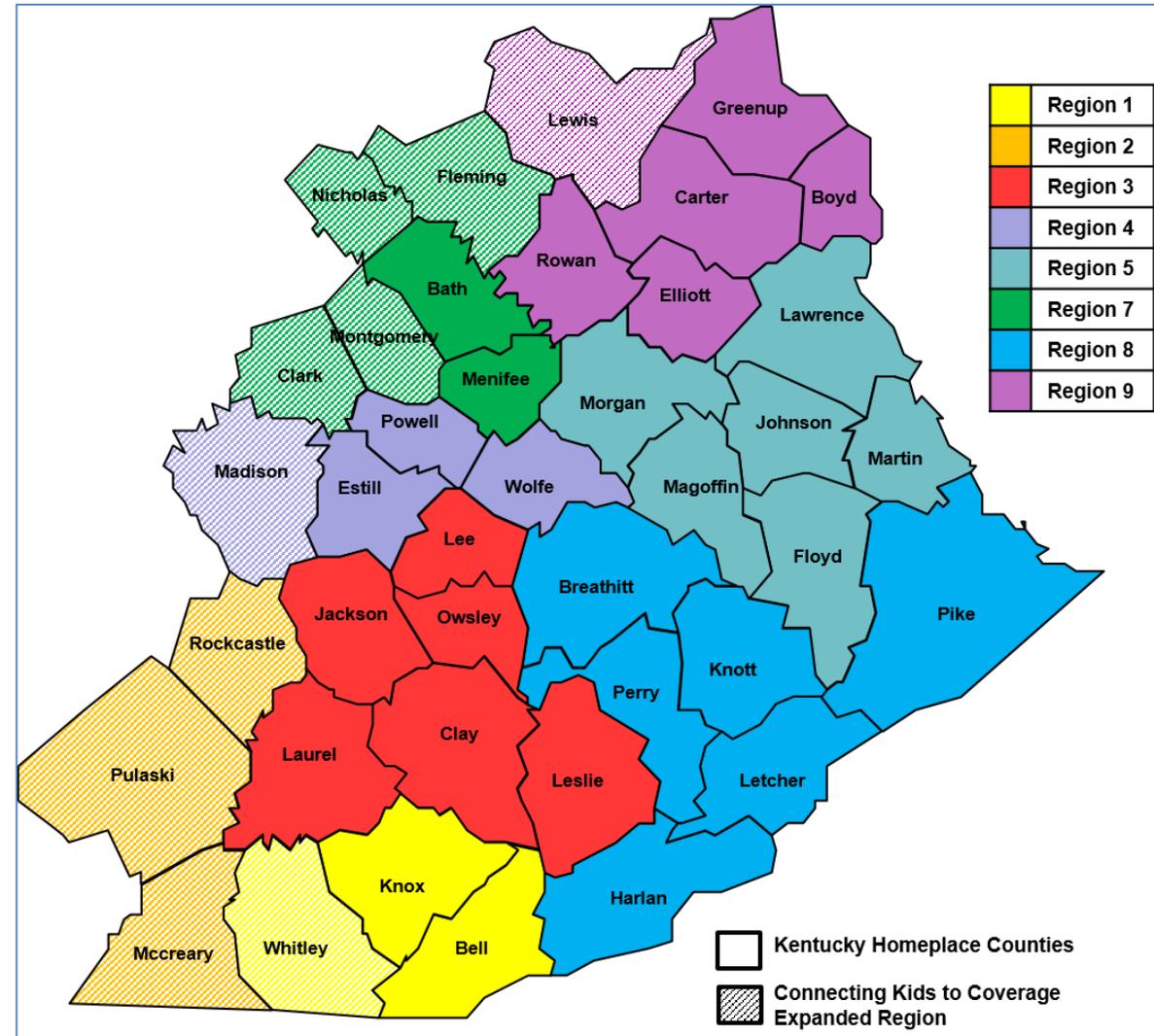
Connecting Kids to Coverage: Outreach and Enrollment Cooperative

1. Increase enrollment in KCHIP and Medicaid by providing application and renewal assistance in 40 Appalachian counties of Kentucky utilizing community health workers
2. Partner with existing programs to complement and fill gaps within the rural communities
3. Expand the capacity and build upon an existing community health worker program.

Dr. Frances Feltner - Principal Investigator

Project Period: 7/1/16 – 6/30/18

Funding: Centers for Medicare & Medicaid Services



Kentucky Homeplace: CHW Roles and Responsibilities

Family Health Advocate | **Community Health Educator** | CAMP HEALTH AIDE | Patient Navigator | Community Health Representative | *Community Care Coordinator* | **FRIEND** | Outreach Specialist | *Weight Loss Counselor* | Public Health Aide | **NEIGHBOR** | *Community Health Worker* | Community Neighborhood Navigator | *Case Work Aide* | Consejera/Animadora | Environmental Health Aide | **ADVOCATE** | Patient Health Navigator | *HIV Peer Counselor* | Lactation Consultant/Specialist | Neighborhood Health Advisor | **COMMUNITY HEALTH PROMOTER** | **FAMILY** | Lay Health Advisor | Family Service Worker | *Maternal Child Health Worker* | **VOICE** | COMMUNITY HEALTH ADVOCATE | *Parent Support Partner* | Community Outreach Worker | **COMMUNITY** | Community-Based Doula | *Maternal/Infant Health Outreach Worker* | Peer Educator | PROMOTOR(A) DE SALUD | **you**

- Outreach and community mobilization
- Assist case management teams in care coordination
- Home-based support
- Health promotion and health coaching
- System navigation
- Participatory research
- Community/cultural liaison

Kentucky Homeplace: Who We Serve

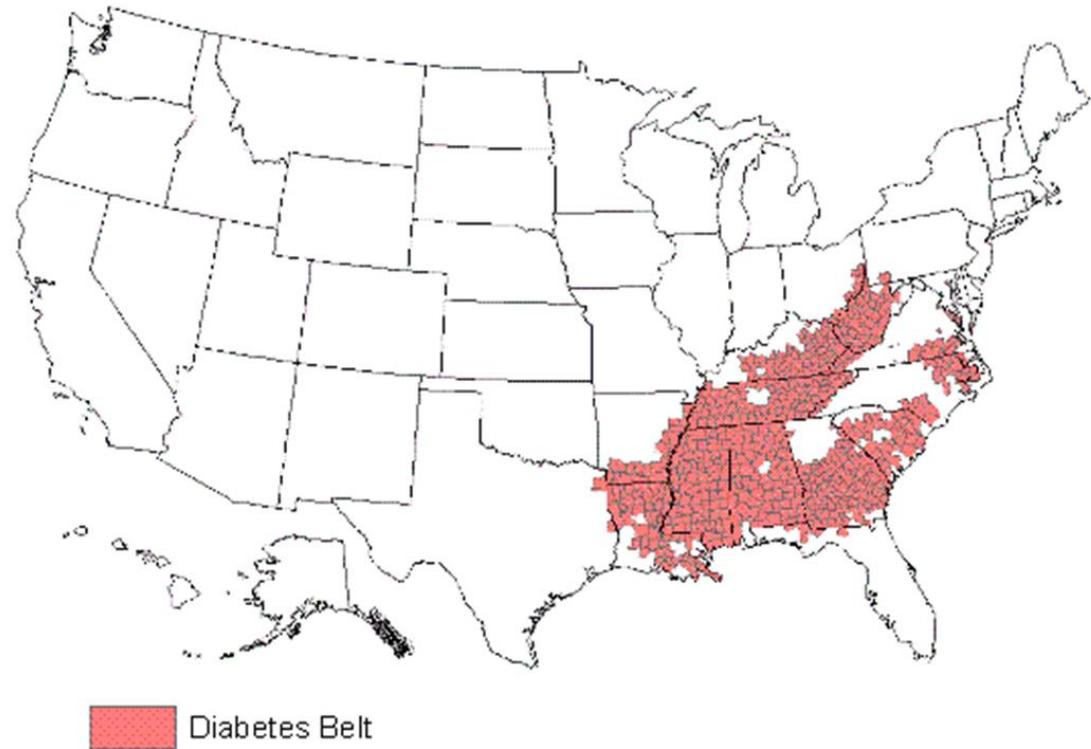
- The program's beneficiaries are the medically underserved or "the neediest of the needy."
- Residents of these areas are statistically poorer
- Most clients are at 100% - 133% of the federal poverty level.
- Less educated
- Most clients have a high school diploma or have some high school education
- Less likely to have medical coverage than those in other parts of the state and nation.
- Prior to January 1, 2014 the Homeplace population uninsured rate was 61.1% and now the rate is down to 22.8%.

Barriers, especially for poor rural people, include lack of knowledge about services, inadequate information on their own conditions, social and cultural inhibitors, lack of money, transportation, and numerous other factors.

Diabetes in Kentucky

- Sixty eight of Kentucky's 120 counties are located in the diabetes belt.
- One in eight adults have been diagnosed doubling the rate from 6.5% in 2000 to 12.5% in 2014 (KY Public Health 2016)

Kentucky Homeplace CHWs are trained as lay leaders in Chronic Disease Self Management (CDSMP) and Diabetes Self-Management Program (DSMP).



[Source](#)

CHWs are Reaching People



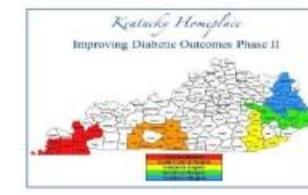
Kentucky Homeplace *Improving Diabetic Outcomes (I DO)*

Residents of rural Kentucky have unusually high levels of certain diseases. These include cancer, heart disease, hypertension, asthma, and diabetes. Lifestyle choices, environmental factors, inadequate health insurance and general lack of understanding of the healthcare system are often cited as contributing to this condition. Kentucky Homeplace was created to help address these issues.

In Kentucky, 54 (45%) of its 120 counties are considered Appalachian and are mostly located in Eastern Kentucky. Diabetes has become a common disease in this region. In these counties, 10.6%-16.3% of the population has been diagnosed with diabetes compared to 8.3%-10.5% in non-Appalachian counties. Residents of the State's Appalachian counties are poorer, have lower levels of education and are less likely to have medical coverage than those in other parts of the state and nation. Nearly all clients are between 100%-133% of the Federal Poverty Level. Further complicating the matter is that most of the state's 120 counties are designated as medically underserved areas. Barriers include lack of knowledge about services, inadequate information on their own conditions, social and cultural inhibitors, lack of money, transportation, and numerous other factors.

In July 2011, The Anthem Foundation, Inc., awarded Kentucky Homeplace a \$150,000 charitable gift titled *Improving Diabetic Outcomes (I DO) Phase I* to aid their diabetic clients in improving their health outcomes through individual case management combined with nutrition, diabetic and general health education. In March 2012, because of the first years' success and the need to reach many of the clients diagnosed with diabetes and those at risk of becoming diabetic, the Anthem Foundation awarded Kentucky Homeplace with another \$150,000 charitable gift to fund *Improving Diabetic Outcomes (I DO) Phase II*.

I DO Phase II will be administered within at least 26 Southeastern Kentucky counties, 12 counties located in South Central and in the most Western counties served by Homeplace. The service area includes most rural counties in Kentucky as 31 of these 38 counties fall within the "diabetes belt". This project will allow Kentucky Homeplace to continue developing and expanding a comprehensive program aimed at improving diabetic outcome measures and increasing the client's diabetes disease self management knowledge. The ultimate goal of the program is to reduce complications caused by diabetes and to improve the quality of life.



Improving Diabetic Outcomes is sponsored through a gift from the Anthem Foundation
Kentucky Homeplace • 750 Morton Boulevard • Hazard, KY 41701 • (855) 859-2374

Stroke in Kentucky

- In 2013 Kentucky had almost 24,600 non-fatal hospital visits, and approximately 6,826 non-fatal emergency department (ED) visits were attributed to stroke (Kentucky Traumatic Brain Surveillance Project, 2014).
- Overall government payers were billed over \$950 million in 2013 and commercial payers over \$225 million for stroke-related care in Kentucky.
- Kentucky is in the center of the “Stroke Belt”.

Stroke Readmissions

- Readmission is common within the first 12 months following discharge from an inpatient rehabilitation setting due to a successive stroke or other complications which may have been prevented (Demaerschalk et. al., 2010; Olson et. al., 2013).
- Thirty-day readmission rates following stroke have been shown to be anywhere between 6.4-12.7% and 33% at one year post discharge (Olson et. al., 2013; Nahab et. al., 2012).
- According to Medicare.gov, the 30-day readmission rate for stroke nationally is 12.7% and in Kentucky the rate is between 12.4-15.3%.

Building on Kentucky Homeplace: A Successful Model (Hospital Based CHW)

- Kentucky Care Coordination for Community Transition Program (KC3T) was developed.
- The CHW serves as a patient navigator and is part of the hospital/provider team
- The participants receiving service from the KC3T navigator had no ED visits within 30 days of discharge compared with 83% of non- KC3T participants (n=12) who had at least one ED visit within 30 days of discharge.
- Participants in KC3T had no stroke-related 30-day readmissions compared to 42% of non-KC3T participants who were readmitted within 30-days of discharge.



KC³T Co-Morbidities Results

- 30 individuals (17 females and 13 males), mean age 65 (range 38-88)
- 13 co-morbidities plus tobacco use were tracked for participants. The highest incidences were: 92% high cholesterol, 83% high blood pressure, 71% arthritis, 63% diabetes and 37% depression.

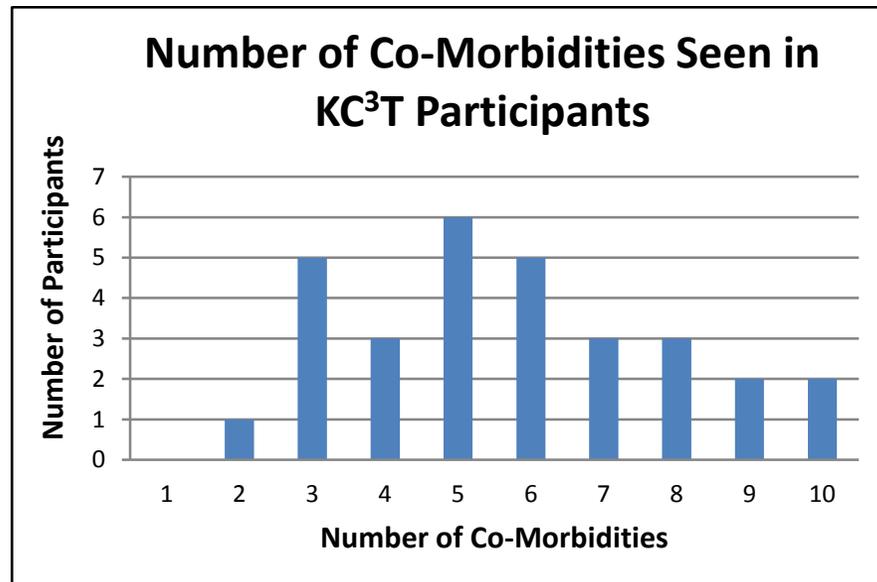


Figure 1: Demonstrates the high level of co-morbidities borne by the stroke population in southeastern Kentucky. Twenty one of the KC³T participants (70%) had 5 or more co-morbidities.

KC³T Participation Results

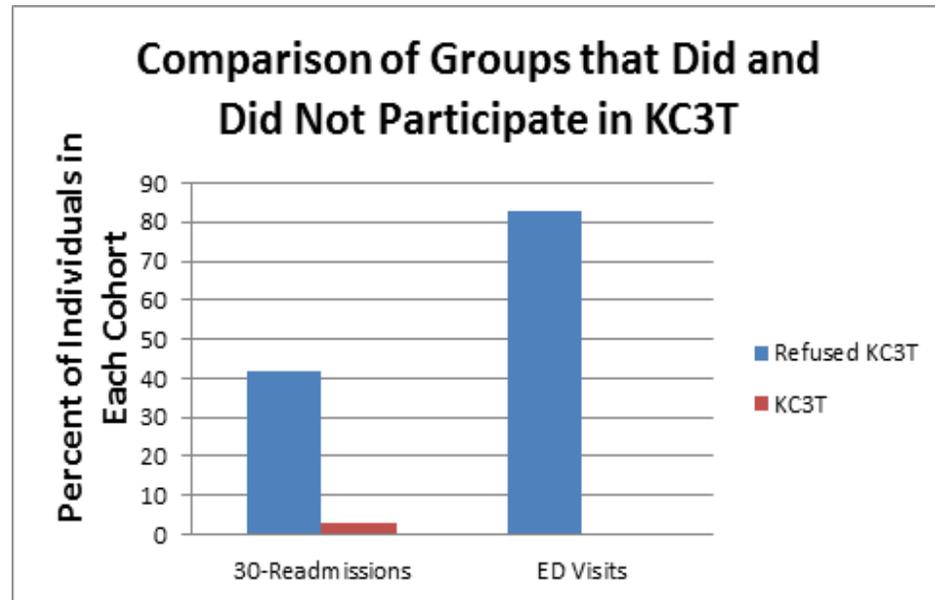


Figure 3: No Emergency Department visits within 30 days of discharge (compared to 83% of non-participants [n=12] had ED visits)

One hospital readmission that was not stroke-related; no stroke-related readmissions (compared to 42% of non-participants were readmitted)

- 92% of participants were compliant with medications
- 96% of participants attended all physician visits
- 70% of participants attended all outpatient rehabilitation visits

Stroke Support Group

- Started in June 2015
- Meets monthly at ARH – Hazard
 - The last Wed of each month
 - Continues to grow
- Provides a forum for additional education to be provided by healthcare providers.



WRAP Study

Cultural Adaptation of Collaborative Care for Depressed Appalachian Women: A Community Health Worker Model

PI: Claire Snell-Rood

Goal: Identify acceptable methods of educating and providing mental health services for Appalachian women.

What is WRAP?

The Wellness Recovery Action Plan (WRAP®) is a personalized wellness system designed to help people self-manage their own health. WRAP helps people to: 1) decrease and prevent intrusive or troubling feelings and behaviors; 2) increase personal empowerment; 3) improve quality of life; and 4) achieve their own life goals and dreams. Each person taking part in WRAP creates their own wellness toolkit. Individuals learn to use WRAP through a peer-led and peer-engaged group process led by community health workers.

Researchers at the University of Kentucky College of Medicine are conducting research on how WRAP can work for women in Appalachian Kentucky.

Why WRAP?

This is a program specifically for women who are stressed, overwhelmed, and down. This is a 'self-management' program, which means it can help you to develop your own plan to feel healthier overall. Women especially have a lot to balance between their families, work, and health, which often means that they put themselves last. This is a program that helps you to figure out how to take care of yourself.

WRAP Session



UNIVERSITY OF KENTUCKY RESEARCH



Feeling down?

Researchers at the University of Kentucky College of Medicine are interested in improving programs for women with complex health problems. Participants will take part in a trial of a wellness program called Wellness Recovery Action Planning (WRAP) led by community health workers.

You may be eligible to participate if you:

- Are an adult woman;
- Feel down;
- Live in southeast Kentucky; and
- Are able to take part in a 6 session self-management program.

Sessions will be held at the UK North Fork Valley Community Health Center in Hazard, Kentucky.

Participants will be compensated for taking part in this study.

For more information or to take part in this study, please contact:
Wayne Noble at (606) 439-3557, ext. 83656
or by email at wayne.noble@uky.edu

 **Research**
An Equal Opportunity University
www.UKclinicalresearch.com

WRAP

BEHAV-105_flyer #

Prevention

	United States	Kentucky	Kentucky Homeplace
Mammogram	75.60%	78.20%	80.15%
Pap Smear	69.40%	74.20%	96.43%
Colonoscopy	62%	71.20%	56.48%
Fit Test	10%	14.5%	30.95%

[Sources:](#)

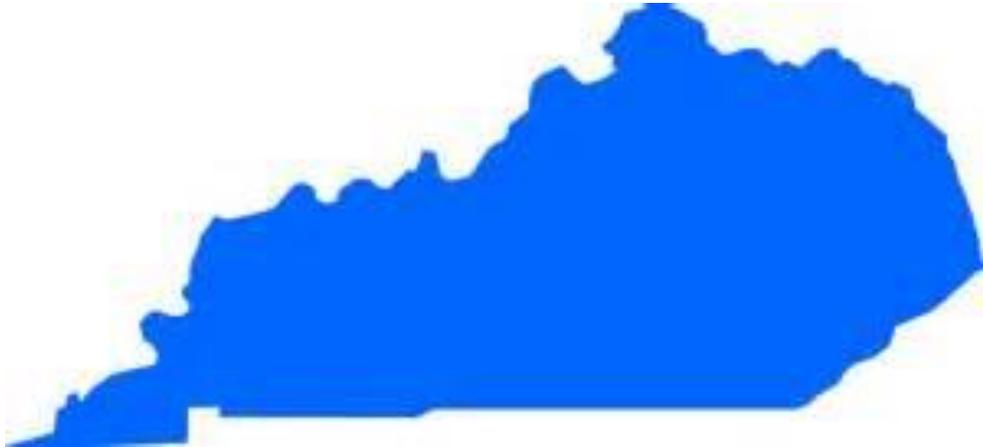
Colon Cancer

- In 2013 (the most recent year numbers are available)—
 - 136,119 people in the United States were diagnosed with colorectal cancer, including 71,099 men and 65,020 women.
 - 51,813 people in the United States died from colorectal cancer, including 27,230 men and 24,583 women.
- Between 2007 and 2020, the number of deaths is expected to go up 15.2% in men and 8.1% in women, although the rate of cancer deaths per 100,000 people in the United States is expected to keep going down.
- We expect cancer death rates to drop most for—Colorectal cancer (23.4%).

[Sources:](#)

Screening Need

- The most recent rates were reported in 2012 by the American cancer society: Of adults age 50 and older 63.3 percent had been screened (that's all adults and races-not by gender).
- In the University of Kentucky 2015 publication (Variation in Colorectal Screening Rates in Kentucky Since the Development of the Colon Cancer Screening Program in 2008), 71.04% of females had been screened and 66.92% of males.



[Sources:](#)

Community Health Workers Break Barriers

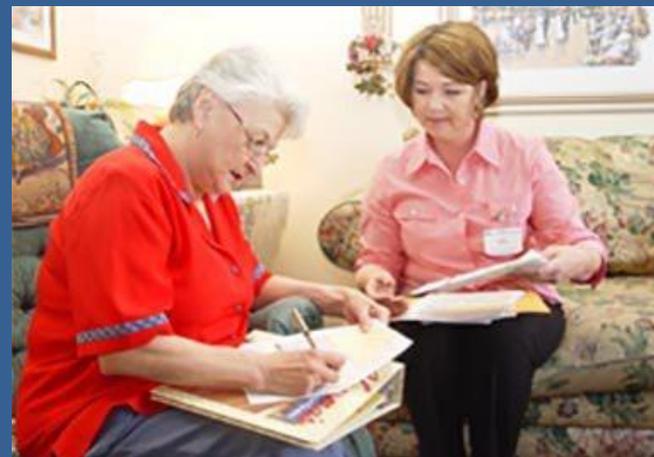
by James Nold, Jr. | November 9, 2015

Today's CHWs...

They're not doctors, nurses, or social workers. They're people from the local community who've learned enough about the healthcare system to serve as health coaches and can help others surmount barriers. They can also connect their clients to resources they may not have known about.



Community health workers like Julia Keene, right, know enough about the healthcare system to serve as health coaches and can help others surmount barriers.



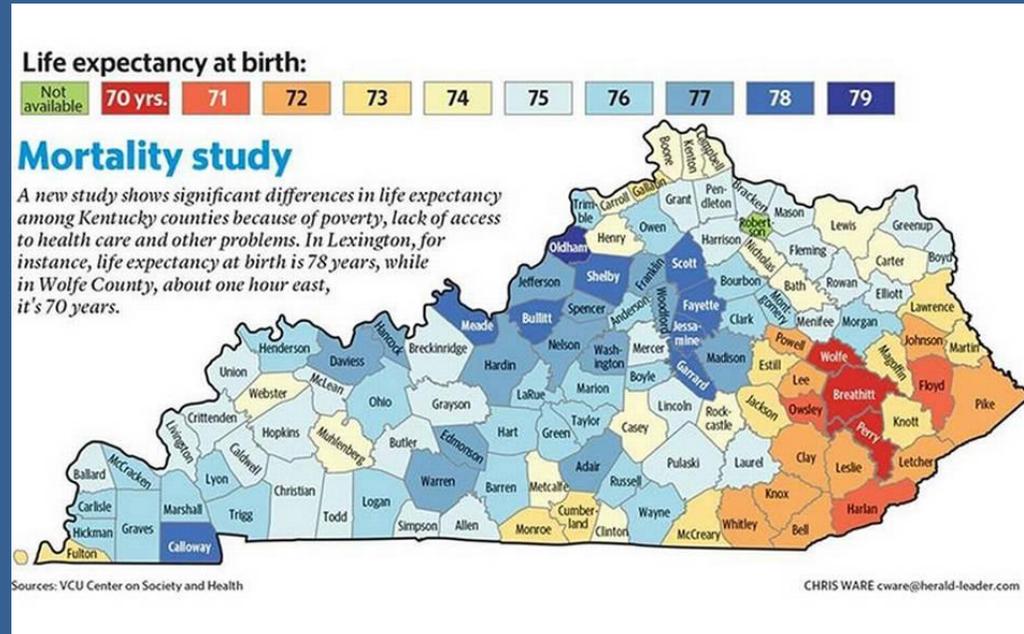
Judy Bailey, right, a community health worker in Johnson and Magoffin counties, helps clients navigate the health care system.

Where You Live in Kentucky Might Cut Eight Years Off Your Life

by Bill Estep | June 6, 2016

Today's CHWs...

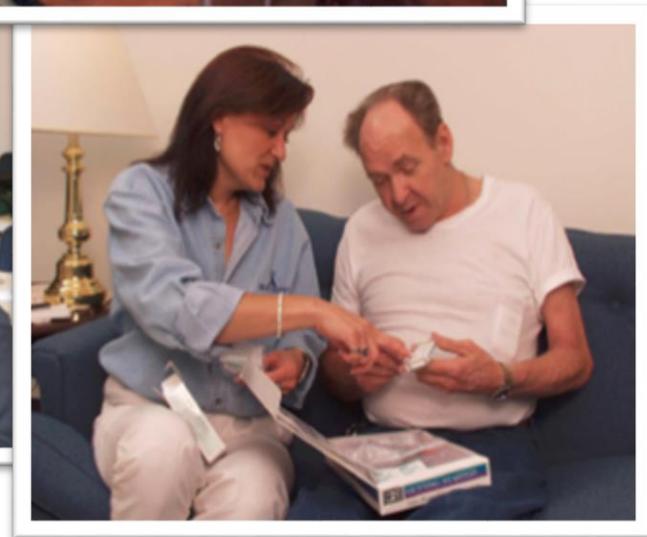
Another example is the University of Kentucky's Center of Excellence in Rural Health, based in Hazard, which has been recognized nationally for the Kentucky Homeplace program that has community health workers educate poor people on disease prevention and helps them get medical and other services.



CHWs can be part of a care team

Case Management/Care Coordination Stages; Making a Plan for Clients

- Complete an Initial Assessment
- Identify Goals
- Develop Team Care Plan
- Implement Plan
- Monitor outcomes
- Advocate
- Celebrate reached goals and improved outcomes



CHWs Remove Barriers

One of CDC's four overarching Health Protection Goals is "Healthy People in Healthy Places." This goal addresses the idea that the places where people live, work, learn, and play will protect and promote their health and safety, especially those people at greater risk of health disparities.

- Social determinants of health are factors in the social environment that contribute to or detract from the health of individuals and communities. These factors include, but are not limited to the following:
 - Socioeconomic status
 - Transportation
 - Housing
 - Access to services
 - Discrimination by social grouping (e.g., race, gender, or class)
 - Social or environmental stressors

[Source:](#)

CHWs activities positively contribute towards achievement of the Triple Aim of Healthcare

Improve Patient Experience	Improve Population Health	Reducing Costs
<p>CHWs are effective connectors to the resources in their communities; they are trusted members of their communities because they have an unusually close understanding of the social context of patient's lives.</p> <p>CHWs understand risk behaviors and serve as motivators and provide community engaged risk management education and support.</p> <p>The goal is to strengthen patient's self-efficacy, improve medication adherence, and improve access and quality of care.</p>	<p>CHWs are an integral member of primary care team.</p> <p>They contribute to chronic disease management through ensuring continuity of care, coordination of care and overall quality of care.</p> <p>CHWs educate and coach patients and are very successful in increasing the use of preventive health services.</p> <p>Working with the team CHWs encourage patients in self-care management and care coordination.</p> <p>They also collect accurate patient data and contribute to community based research in reaching the underserved, hard to reach valuable populations within their communities.</p>	<p>Coaching patients on preventive health behavior</p> <p>Reducing ER visits</p> <p>Reducing hospital admissions and readmissions</p> <p>Navigate and connect patients to community based primary care services</p> <p>Enhancing health provider's understanding of patient needs Follow-up and appropriate referrals</p>

National Support and CHW Recognition

- CDC Division for Heart Disease and Stroke Prevention 2011
- National Prevention Council 2011
- HHS Action Plan to Reduce Racial and Ethnic Health Disparities 2011
- HHS National Health Action Plan to Improve Health Literacy 2010
- Agency for Healthcare Research & Quality 2009
- American Public Health Association 2009, 2001
- Institute of Medicine 2003
- American Medical Association 2002

The Future for CHWs



The Future of Health Care Is Outside the Doctor's Office

by Mattie Quinn | March 2017



States are increasingly investing in community health workers to improve their residents' health.

[Source:](#)

Community Health Workers Help Kentuckians Deal with the Multitude of Obstacles Between Them and Better Health

by Melissa Patrick | December 30, 2016

CHWs are becoming an integral part of a health system that is increasingly focused on outcomes and the social determinants of health.



Pictured is Samantha Bowman,
CHW for Kentucky Homeplace

Opportunities: Medicaid Reimbursement for Community Health Worker Preventive Services?

- The Centers for Medicare and Medicaid Services (CMS) created a new rule which allows state Medicaid agencies to reimburse for preventive services provided by professionals that may fall outside of a state's clinical licensure system, as long as the services have been initially recommended by a physician or other licensed practitioner. The new rule for the first time offers state Medicaid agencies the option to reimburse for more community-based preventive services, including those of CHWs. The rule goes into effect on **January 1, 2014**.
- The new rule now states,
 - “(c) *Preventive services* means services recommended by a physician or other licensed practitioner of the healing arts acting within the scope of authorized practice under State law to—
 1. Prevent disease, disability, and other health conditions or their progression;
 2. Prolong life; and
 3. Promote physical and mental health and efficiency.”

Overview of Kentucky Homeplace Training and How To Participate

- Online pre-training includes institution required trainings such as Health Insurance Portability and Accountability ACT (HIPAA), Research Human Protection, Compliance, etc...
- The protocol manual builds on the 40-hour didactic training and 80-hour practicum (shadowing experienced CHWs) within the three month orientation period. The training covers the major health and social problems encountered by Kentuckians. The manual was developed in consultation with health providers and from researching current health information. Components of every client's care include emphasis on prevention, chronic disease self-management and encouragement of healthy lifestyle.
- Kentucky Homeplace CHW training includes 40 hours in class training to prepare CHW to work as "generalist" in their communities.

CHW Trainings

- Kentucky Homeplace Community Health Worker
- Basic Life Support/Cardio Pulmonary Resuscitation
- Chronic Disease Self-Management Program Workshops and Lay Leaders
- Diabetes Self-Management Program Workshops and Lay Leaders
- Wellness Recovery Action Plan Training
- Mental Health First Aid
- Medicaid KCHIP Training and Kentucky Benefit Exchange Program “Benefind”

Kentucky Homeplace: Core Competencies

- Communication
- Use of Public Health Concepts and Approaches
- Organizational and Community Outreach
- Advocacy and Community Capacity Building
- Care Coordination and System Navigation
- Health Coaching
- Documentation, Reporting and Outcome Management
- Legal, Ethical and Professional Conduct

Kentucky Homeplace: Scope of Practice

- Advocate for individual and community needs
- Navigate health and human services systems
- Bridge gaps through networking with communities and health/social service systems to remove barriers
- Care coordination
- Provide health education, preventive health promotion, health coaching and reinforcement
- Build individual and community capacity
- Competency-based training and credentialing program
- Developing a stable source of funding

Conclusion

- Community health workers (CHWs) play a significant role in reducing and/or managing chronic illnesses, reducing healthcare costs, and improving the overall health of the population.
- Evidence gathered over the years makes it clear that support for, and development of, a CHW workforce is a wise investment.
- At the federal level, CHWs are recognized as professional members of the health care workforce who effectively address social determinants of health and reduce health disparities (US Department of Health and Human Services).
- CHWs are important professionals on the health care team



Kentucky Homeplace



Connecting Kids to Coverage



Kentucky Association of Community Health Workers

kyruralhealth.org

Questions



CHW Articles

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