Kentucky Adult Medicaid Tobacco Use: An Opportunity For Change

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EXECUTIVE SUMMARY:

Medicaid recipients have a higher prevalence of smoking and associated medical expenditures than non-Medicaid recipients. Kentucky has a high prevalence of both smoking and poverty. 12% of Kentucky's total annual Medicaid expenditure is attributable to smoking. Current Kentucky law has created a comprehensive smoking cessation program including counseling and medications, it has but remained unfunded since its passage in 2007. Despite high health costs, physicians do not routinely perform tobacco cessation counseling, and are not aware of tobacco cessation treatment options covered by Medicaid. The Kentucky Public Health Leadership Scholar Team (KPHLIST) used Kentucky Medicaid Adult Patient survey data to assess physician-patient discussions on tobacco cessation and specific options for treatment of tobacco addiction. We (KPHLIST) also piloted a survey of Medicaid physicians in northeast Kentucky about their tobacco cessation counseling attitudes and practices. As a result of both studies, we have developed tools for physicians to use regarding tobacco cessation counseling and treatment.

INTRODUCTION/BACKGROUND:

Problem Statement:

"Why despite the overwhelming cost of tobacco related disease do Medicaid recipients receive inadequate smoking cessation advice"?

Smoking and Health:

According to the Center for Disease Control (CDC), smoking continues to be the leading cause of preventable morbidity and mortality in the United States[1].

Smoking and Kentucky:

While the median prevalence of current adult smoking in the US is 19.8%, Kentucky leads the nation with a prevalence of 28.3%. [2]. From 2000 to 2004 Kentucky led the nation in mortality attributable to smoking, with a smoking death rate of 371 deaths per every 100,000 adults age 35 and older. This is comparable to West Virginia with the second highest rate, 344 deaths, and Utah with the lowest rate, at 183 deaths[3,4].

Smoking and Medicaid in Kentucky:

Medicaid is a health care program for eligible individuals and families with low incomes and resources. It is jointly funded by state and federal government. While it is managed by each individual state, each state's program must conform to certain federal guidelines in order to receive matching funds and grants. Federal payment rate to each state varies by state and depends on state poverty level.

Medicaid spending by states continues to increase from an average of 8% in 2005 to 21.5% in 2006. Reducing or containing costs by preventing disease is critical. One example of disease prevention is tobacco cessation programs. Tobacco cessation programs could be especially useful with the Medicaid population, since studies have shown that the national Medicaid population has a higher prevalence of smoking than the total US population (34.5% versus 22.6%)[5]. In 2009, Armour et al. published the results of a study model which identified the portion of each state's Medicaid expenditures attributable to smoking. The results showed 11% of total expenditures nationally and 12% in Kentucky where 65% of Medicaid recipients smoke[5].

The American Lung Association, in its report *State of Tobacco Control*, rates states based on the regulations implemented to control tobacco use and cover cessation methods. In 2009 Kentucky ranked all "F's" in terms of tobacco control and spending, smoke-free air laws, cigarette taxes, and cessation coverage. Medicaid specifically covers little when it comes to tobacco cessation in Kentucky. According to the American Lung Association, medications including nicotine replacement therapy , buproprion, and varenecline are only available to members in 16 of 120 counties, and counseling is only available to pregnant women[6]. In 2007, Kentucky legislature passed a bill that created a comprehensive smoking cessation program for Medicaid patients[7]. HB 337 created programs that included counseling and medications for Medicaid patients. However, this bill was never funded. Currently Kentucky spends 6% of the tobacco reimbursement money from the Federal government, far short of the $56 million advocated by the Surgeon General of the United States.

Tobacco Cessation: What Works:

The US Preventive Services Task Force (USPSTF) recommends that all physicians ask patients about tobacco use and provide tobacco cessation interventions for those who use tobacco products[8,9]. Specifically, they recommend use of the 5 A's (ask, advise, assess assist, arrange), counseling, and pharmacotherapy. Furthermore, they provide recommendations for successful implementation of tobacco cessation methods in primary care, which include implementation of a tobacco user identification system, promoting clinician intervention through education, resources, and feedback, and dedicating staff to provide treatment and assessing treatment delivery[9].

Currently, the Cooper Clayton counseling method is being implemented by every health department in the state of Kentucky[10].

Studies demonstrate that even just talking to patients about stopping smoking can help increase the likelihood that they will quit. According to the Agency for Healthcare Policy and Research (AHCPR) Clinical Practice Guidelines, talking to a doctor just once about quitting can increase the quit rate seventy percent[11,12].

Furthermore, studies demonstrate that patients for whom cessation is covered are more likely to quit. For example, Petersen et al found that for pregnant women on Medicaid, higher levels of tobacco cessation coverage were associated with higher quit rates:

namely, 51% in patients in states with extensive coverage, 43% in states with some coverage, and 39% in states with no coverage[13]. Unfortunately, as the economy continues to make it more expensive to smoke, it also continues to make it more expensive to quit. For example, in 2010 Pennsylvania cut its tobacco cessation funding nearly in half to 17.2 million dollars, while it is currently spending 5.2 billion dollars yearly to fund smoking-related health care costs, leaving the potential for this health care cost to increase[14].

What are physicians doing to help their patients quit smoking?

Studies demonstrate that physicians do not routinely perform tobacco-cessation counseling, and that they are not aware of tobacco cessation treatments covered by Medicaid[15].

Behavior Over Time Graph:

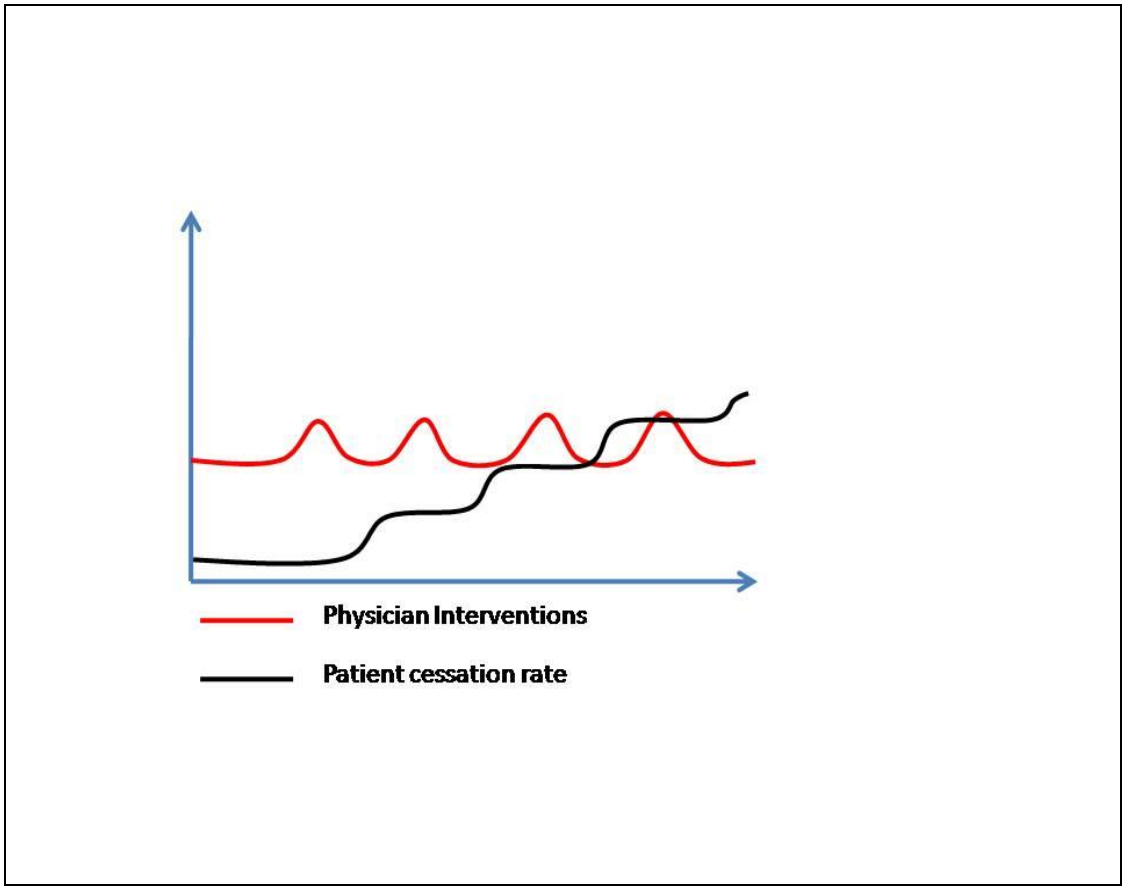

Figure 1: Behavior Over Time Graph

This diagram illustrates the change in behavior that can occur over time if the patient is afforded access to recurrent messages to stop smoking.

Causal Loop Diagram:

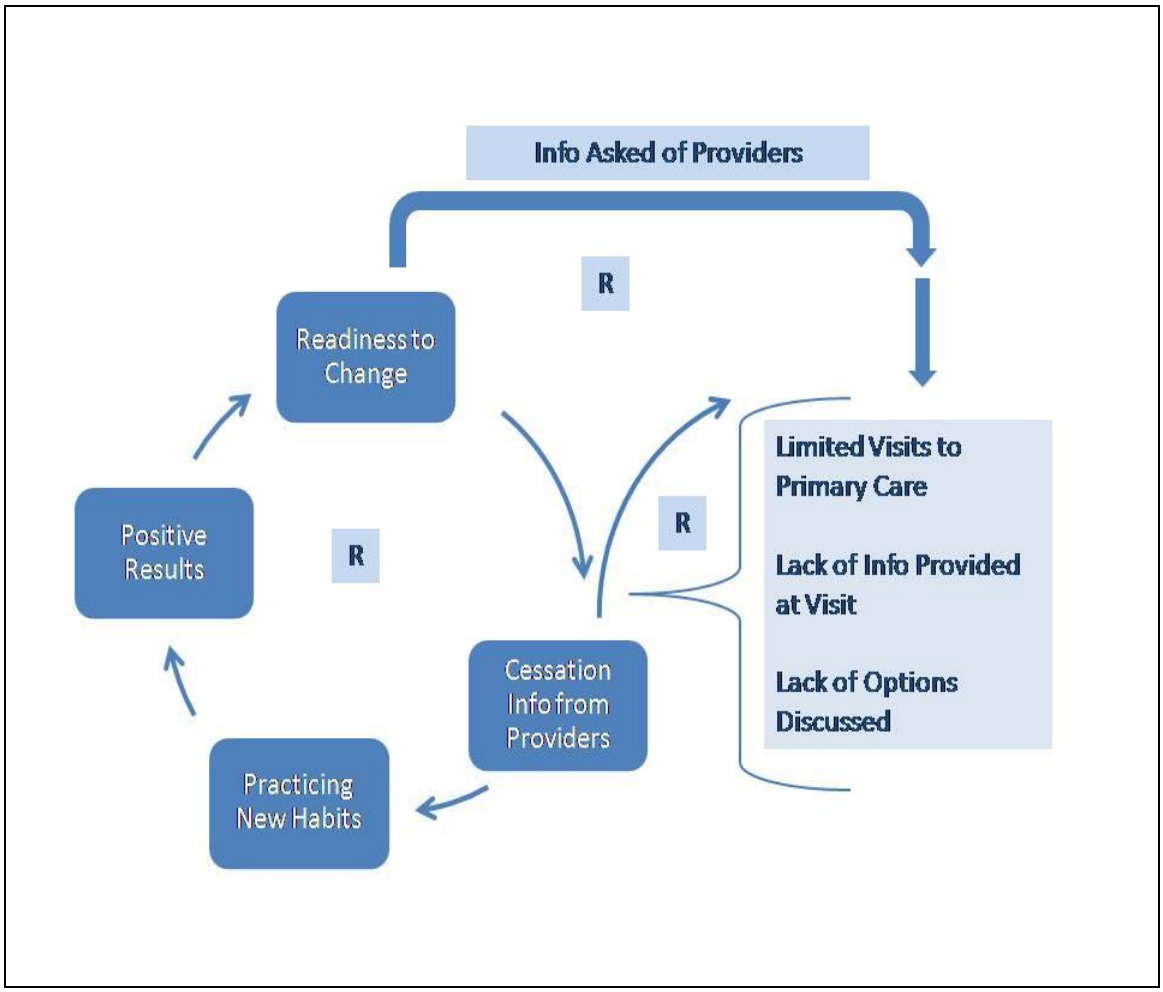

Figure 2: Causal Loop Diagram

This diagram illustrates the reinforcing concepts of smoking cessation education. The lack of adequate clinic visits and effective counseling can inhibit readiness to change.

10 Essential Public Health Services/National Goals Supported:

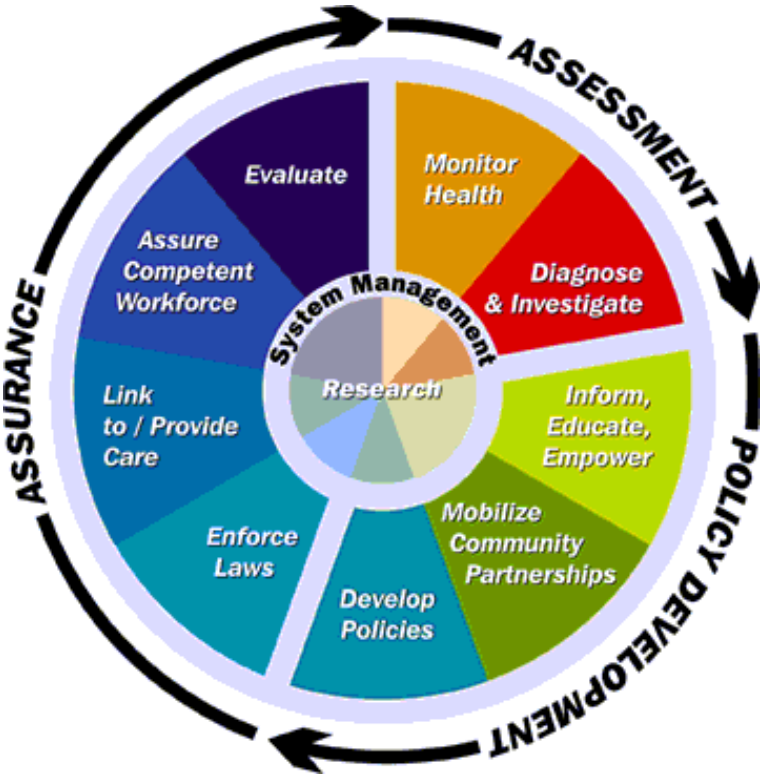

Figure 3: This picture is from the 10 Essential Public Health Services.

This project covers three of the 10 Essential Public Health Services/National Goals:

#3 Inform, educate and empower people about health issues.
#5 Develop policies and plans that support individual and community health efforts.
#6 Enforce laws and regulations that protect health and ensure safety.

Additionally, this project covers several objectives of the Healthy People 2010 – Department of Health and Human Services (DHHS) and the proposed Healthy People 2020 Objectives. Tobacco is identified as one of the ten featured Leading Health Indicators.

Healthy People 2010 Objectives – Tobacco Use

3-10 Increase the proportion of physicians who counsel their at-risk patients about tobacco use cessation (physical activity, and cancer screening).

27-1 Reduce tobacco use by adults.

27-5 Increase smoking cessation attempts by adult smokers.

27-6 Increase smoking cessation during pregnancy.

27-8 Increase insurance coverage of evidence-based treatment for nicotine dependency.

Proposed Healthy People 2020 Objectives – Tobacco Use

TU HP2020-1: Increased smoking cessation during pregnancy.

TU HP2020-4: Increase the number of states and the District of Columbia, territories, and tribes with sustainable and comprehensive evidence-based tobacco control programs.

TU HP2020-5: Reduce tobacco use by adults.

TU HP2020-8: Increase smoking cessation attempts by adult smokers.

TU HP2020-10: Increase insurance coverage of evidence-based treatment for nicotine dependency.

TU HP2020-17: Increase tobacco cessation counseling in health care settings.

TU HP2020-18: Increase recent smoking cessation success by adult smokers.

TU HP2020-19: Increase tobacco screening in healthcare setting

PROJECT OBJECTIVES/DESCRIPTION/DELIVERABLES:

Objectives:

1) Investigate data contained in the Adult Patient Medicaid Survey to evaluate the patients' perception of smoking cessation efforts by their health care providers
2) Develop and deploy a new questionnaire to northeast Kentucky physicians to assess their attitudes toward tobacco's effect on patient's health and their confidence in giving tobacco cessation advice
3) Revise and deploy the physician questionnaire to a second physician population in Kentucky
4) Develop tools to improve the delivery of tobacco cessation advice to the Medicaid patient

Deliverables:

1) Tobacco cessation questionnaire with revisions and initial analysis
2) Tobacco cessation "pocket" tool
3) Consolidated Continuing Medical Education(CME) education materials

METHODOLOGY:

We performed studies that assessed patient and physician views of physician counseling and treatment for tobacco cessation.

1) Study 1: We used Kentucky Medicaid Adult Patient survey data to assess patient perspectives of physician-patient discussions on tobacco cessation and specific options for treatment of tobacco addiction.

2) Study 2: We used data from a physician survey performed at a large regional referral medical center in northeast Kentucky to assess current attitudes of physicians of multiple specialties as well as barriers and facilitators to tobacco cessation counseling and treatment.

3) Study 3: (*in progress*): We surveyed primary care physicians at a large academic medical center in Kentucky to assess current care and barriers and facilitators to tobacco cessation counseling and treatment.

RESULTS:

Study 1: Tobacco cessation counseling and treatment in Medicaid Recipients in Kentucky

Background and Methods:

We used Kentucky Medicaid Adult Patient survey data to assess patient perception of physician tobacco cessation counseling and treatment. We hypothesized that most patients report receipt of tobacco cessation counseling, but that offers of specific options for treatment were low. We conducted a descriptive analysis using tobacco cessation related questions from the 2009 Annual Kentucky Medicaid Adult Patient Surveys. The survey was randomly sent to 5,000 adult (≥18 years of age) Medicaid patients. We excluded patients who were not receiving routine care over the previous six months.

Results:

907 patients returned surveys in 2009. Of these, 739 (81%) patients met criteria and were included in the analysis. Of these 739, 548 (74%) were female, 33 (4%) were pregnant at the time of survey completion, 85% were white, 4% were Hispanic, 414 (56%) had a high school education or above, and 351 (49%) reported smoking some or all days and were counted as smokers. This is compared to a smoking prevalence of 20.6% in the US overall in 2008, and a smoking prevalence of 25.3% in Kentucky in 2008, which was the state with the third highest prevalence of smoking in the nation that year, and a 31.5% prevalence of smoking in the nation in 2008 among people living below the poverty level.

Of these 351 smokers, 73% were female, 4% were pregnant at the time of survey completion, 88% were white, 5% were Hispanic, and 54% had at least a high school education. 75% of smokers reported being told by a physician to quit smoking on at least one visit in the previous six months. 47% of smokers reported being given a specific recommendation on how to quit smoking during at least one visit in the previous six months. 42% of smokers reported being given medication recommendations, such as nicotine gum, path, nasal spray, inhaler, or prescription medication, and 36% of smokers reported specifically being given non-medication recommendations to assist with quitting smoking in the past six months.

Study 2: Physician knowledge and attitudes toward smoking cessation counseling in Kentucky

Background and Methods:

Studies demonstrate that physicians do not routinely perform tobacco-cessation counseling, and that they are not aware of tobacco cessation treatment costs covered by Medicaid. We used data from physician surveys performed at a large regional referral medical center to assess current care by physicians as well as barriers and facilitators to tobacco cessation counseling and treatment. The purpose of the questionnaire was to collect information from the physician attendees about their knowledge and attitudes toward smoking cessation counseling and treatment in their medical practices.

We conducted a descriptive analysis using data from a quantitative survey given to physicians in January of 2010 at a medical center in northeast Kentucky. The center is a large regional referral center offering comprehensive medical care in both primary care as well as multiple subspecialties. The survey was distributed and collected during a scheduled quarterly meeting of the entire medical staff where a wide range of medical and surgical specialties were represented. No provisions to establish the identity of the surveyed physicians were made, and the survey questions did not allow for any identification of the respondents. One question was removed from the analysis due to potential for confusion.

Results:

167 physicians attended the meeting and were given a survey. There were 49 respondents (29%). Of these, 48 (98%) reported that they were Medicaid providers. Of all 49 respondents, the mean percentage of perceived use of tobacco products by Medicaid patients was 58%. 65% perceived impact of tobacco use on the health of the provider's Medicaid population as "a lot". 79% percent of providers reported providing tobacco cessation education to their patients. However, only 2% of providers reported that they perceived that their instructions had "a lot" of effectiveness in reducing tobacco use in their patients, with 56% answering "a little" or "zero" effectiveness. Most stated that they would be likely to provide tobacco cessation services if they were available in their office (81%), fully funded by Medicaid (81%), could be made more effective (93%), or

resulted in higher reimbursement (75%). Most (83%) supported legislation in their community to further restrict the use of tobacco, but few (37%) supported legislation requiring physicians to receive additional education on tobacco addiction and effective tobacco cessation methods.

There was no difference in perceived effectiveness of instructions to patients regarding reducing tobacco use in doctors by support of legislation requiring physician tobacco cessation education (p=0.16). There was no difference in perceived effectiveness of instructions by whether a physician provided tobacco cessation education to their patients (p=0.64).

STUDY CONCLUSIONS:

Study 1:

While 75% of Medicaid recipients who smoke who had a clinic visit within the previous six months reported receiving counseling to quit smoking on at least one visit to their physician, 25% reported no counseling. Furthermore, only 47% reported receiving any recommendation for smoking cessation, either medication or non-medication.

This study is similar to that of McMenamin et al, in which the authors surveyed Medicaid patients who smoked in four areas of the US, to assess rates of use of the 5A's by their providers. They found that while most patients reported being asked about smoking status (87%), being advised to quit (65%), and having an assessment of their willingness to quit (51%), that only 24% received any assistance with a quit attempt, such as counseling or medication, and only 13% had arrangements made for a follow-up visit. Only 9% received all 5 A's [15].

Medicaid providers are missing opportunities to provide tobacco cessation counseling and to provide advice on specific methods for tobacco cessation. This may be due to the lack of time or knowledge, or lack of funding for specific tobacco cessation methods for Medicaid patients, as described above with the lack of funding for smoking cessation tools for Medicaid patients. Future goals include assessing change as funding status is altered, and to provide physicians with simple tools for guideline-concordant tobacco cessation counseling and treatment.

Study 2:

Most providers felt that tobacco use had a large impact on their Medicaid population, and while most provided tobacco cessation education to their patients, most felt that their perceived effectiveness in reducing tobacco use was low. Most did not support legislation requiring physicians to receive additional education on tobacco addiction and cessation methods. Providers appear to be providing counseling but lack confidence in the effectiveness of their efforts. Furthermore, most do not support being required to receive additional education on tobacco cessation methods. This is despite studies demonstrating

that physicians do not routinely perform tobacco-cessation counseling and that they are not aware of tobacco cessation treatment costs covered by Medicaid [15]. Physicians are missing opportunities to provide tobacco cessation counseling and to provide advice on specific methods for tobacco cessation.

CONCLUSIONS:

Smoking tobacco is the leading cause of premature death and disease in the United States. Kentucky Medicaid recipients smoke at a greater rate than the general population. Kentuckians lead the nation in smoking prevalence and deaths attributable to tobacco, but it spends only 6% of Federal Tobacco Revenue on tobacco control measures, 41st in the US. Adult Medicaid Patient data indicate physicians may underutilize smoking cessation opportunities. Our data suggest physicians lack confidence in the value of smoking cessation interventions. However, physicians might utilize such techniques more readily if these techniques were locally available, fully funded and if appropriately compensated by Medicaid. KPHLIST developed a pocket reference card to facilitate point-of-care interventions by the physician. The group also consolidated CME offerings to increase knowledge and effectiveness of tobacco cessation methods.

LEADERSHIP DEVELOPMENT OPPORTUNITIES:

Stephanie Rose

I have appreciated the opportunity to participate in KPHLI. The year-long process has been surprising and rewarding, and at times a bit of a struggle. It was surprising, because I have learned things about myself that I didn't expect through the Emotional Intelligence, Social Styles, and the EQI. The struggle came when trying to understand systems thinking, which is a new approach to understanding my interaction with my environment. Finally, it was rewarding, because I have had opportunities to learn about myself, meet new people, and develop as a public health practitioner in Kentucky. I hope to take what I have learned and use it to make a difference in the lives of people in my state and beyond.

Lisa Shook

This past year's experience in KPHLI has been a rewarding experience. It was a great opportunity to learn more about myself with the 360 Emotional Intelligence and social styles and it has encouraged me to continually look at my strengths and weaknesses and seek future learning opportunities. It has been interesting to learn about Kentucky health departments from fellow scholars, learn how to apply systems thinking to my work, and become aware of different leadership styles. I have appreciated the opportunity to learn from and work with a great team.

Kelly Thompson

I did not know what to expect of KPHLI upon my acceptance into the program. The reports from previous graduates were glowing, but did not prepare me for how thorough and thoughtful the program's components actually were, as I learned the very first day. There was so much time dedicated to my growth as an individual and as a leader it was impossible not to walk away from each Summit as a more confident and determined person. I now feel that my strengths are as unique and valuable as anyone's. My weaknesses were made visible so that I can clearly see the road towards improving myself and how more effectively work with others. My team has been amazing. Working with Jon, Stephanie, and Lisa has been a real pleasure.

Jon Walz

I discovered KPHLI as I sought to learn more about Public Health in Kentucky. As the year progressed and ideas began to gel, other opportunities began to take shape as well. Simultaneously, the local Greenup County Health Department began the initial phase of its MAPP project, and, as a scholar and a board member, I had an unlimited opportunity to contribute and learn. As a scholar and physician, I interacted with fellow scholars, legislators, administrators, and fellow physicians with renewed hope and interest in the future of health care in America. As a Scholar team, we have developed crucial skills, collected and analyzed data, proposed solutions, and are set to return to our communities. I give my thanks and warmest regards to my teammates, fellow scholars, and KPHLI faculty.

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