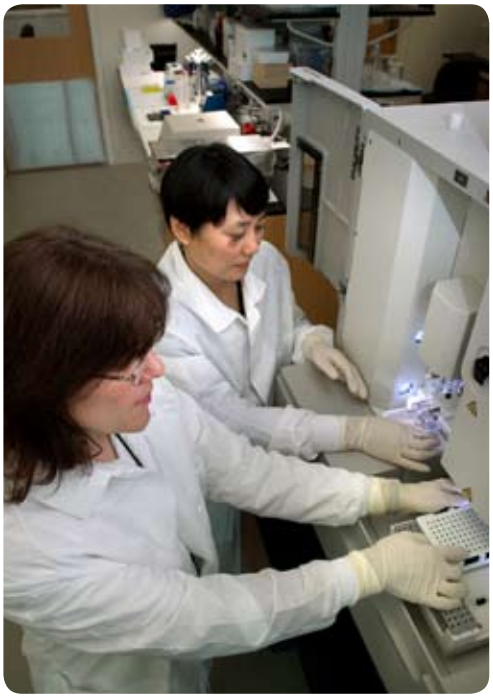
Kentucky e-Health Network Board 2008 Annual Report



Kentucky
UNBRIDLED SPIRIT

The Annual Report of the Kentucky e-Health Network Board

To the
Governor,
General Assembly
Cabinet for Health and Family Services and
Department of Commercialization and Innovation

April 2009

Prepared by
Barbara Baker, Laura Cole, April Smith and Donna Veno
Cabinet for Health and Family Services

Table of Contents

Introduction 1

Board Activities 2

Board Committees 2

- Economic Development 2
- Health Information Technology Adoption 2
- Health Information Exchange 3
- Privacy and Security 4

e-Health Initiatives 5

- e-Health Initiatives Summary 5
- e-Prescribing Partnerships in Kentucky Grants 6
- Statewide Study on Health Information Technology Adoption 9
- Medical Trading Areas Analysis 10
- Medicaid Transformation Grant 12
- Health Information Security and Privacy Collaborative 12
- Harmonizing State Privacy Law Multi-state Collaborative 12
- Provider Education Toolkit 12
- 2nd Annual e-Health Summit 13

Board Meetings Summary 14

Board Membership 17

Introduction

Health information technology promises to be the gateway to fixing the ailing health care delivery system. Kentuckians, as well as most Americans, are concerned about the rising cost and declining quality of health care. The nation spends about 16 percent of its gross domestic product on health care; yet, it lags behind most industrialized nations in health outcomes. The United States spends almost twice as much as the next leading industrialized nation, putting the United States at a severe economic disadvantage in a global economy. In addition, Medicare is predicted to go negative in 2017 with expenditures exceeding the taxable payroll income.

Kentucky moved forward as a leader in health information technology with the passage of bipartisan legislation in 2005 which created the Kentucky e-Health Network Board and the Healthcare Infrastructure Authority. Kentucky is prepared to lead the way in implementing health information technology through the leadership of the Board, Infrastructure Authority, and the Lieutenant Governor of Kentucky as the point person in e-health under the Beshear Mongiardo administration.

Over the past year, the board has focused its efforts toward amending its' vision and mission, operationalizing the Healthcare Infrastructure Authority, and making recommendations regarding the governing structure to oversee the development of e-health in the Commonwealth.

As Kentucky was moving forward with the development of e-health, President Obama has identified health care as one of the priorities of his administration, and has proposed the implementation of health information technology as the most important means to achieve a solution to one of the nation's most pressing problems.

President Obama's administration stated on the White House website, (http://www.whitehouse.gov/agenda/technology/), that the administration intends to:

> "Lower Health Care Costs by Investing in Electronic Information Technology Systems: Use health information technology to lower the cost of health care. Invest $10 billion a year over the next five years to move the U.S. health care system to broad adoption of standards-based electronic health information systems, including electronic health records."

The American Recovery and Reinvestment Act of 2009, also known as the economic stimulus plan or H.R.1) includes an investment of about $19 billion in funding to jumpstart the use of health information technology. Health information technology will reduce the cost of health care, improved quality, help health care providers and patients make better decisions. It is purported that information will make health care more efficient, reduce errors, and keep down costs.

Under the House and Senate versions of the bill, physicians, hospitals and other health care providers who adopt health IT systems would be eligible for higher Medicare and Medicaid reimbursements beginning in October 2010. Physicians who demonstrate that they are using health IT effectively would be eligible for $40,000 to $65,000, while hospitals could quality for several million dollars. In addition, funding is proposed for health information technology infrastructure and research centers to study the effectiveness of health information technology.

This Annual Report will present a summary of the activities of the Kentucky e-Health Network Board and its committees from December 2007 until January 2009.

Board Activities

Board Committees

The Kentucky e-Health Netwwork (KeHN) Board appointed four committees to assist with implementation of the objectives and action items from the Action Plan prepared in 2007. The Board engaged more than 50 volunteers from a variety of stakeholder groups to participate on the Economic Development Committee, Health Information Technology Adoption Committee, Health Information Exchange Committee, and the Privacy and Security Committee. The work of these committees is summarized in the following paragraphs.

The Economic Development Committee is charged with developing linkages to existing technology adoption efforts and fostering the development of e-Health businesses within Kentucky.

During the past year, the Economic Development Committee participated in the following activities.

2007 e-Health Summit

The Economic Development Committee presented *e-Health and Economic Development: Opportunities and Challenges*. This session focused on a critical component of developing a robust e-health economy, which is a workforce skilled in e-health. This includes resources needed to create and implement health information technology as well as health care delivery resources skilled in using technology as a health care delivery tool.

Survey of Kentucky Assets and Current e-Health Projects

The Economic Development Committee completed an extensive review of Kentucky assets that could provide support and infrastructure for e-Health business development in Kentucky. These included initiatives by the Council on Postsecondary Education, the Department for Workforce Development, and the Department of Commercialization and Innovation.

The Committee also reviewed e-Health projects underway around the country. These included AT&T participation in the Dossia Personal Health Record project and IBM's efforts to control medical costs by improving the health of IBM employees. The committee held a joint meeting with the Health Information Exchange Committee for an in depth update on Tennessee's e-Health direction from the Assistant Director of the e-Health Initiative in Tennessee.

The Health Information Technology Adoption Committee is charged with recommending tools, publications, technical support, and incentives that will assist providers and clinicians with adopting health IT in clinical settings.

Over the past year, the Health IT Adoption Committee participated in the following activities.

2007 e-Health Summit

The Health IT Adoption Committee participated in the 2007 e-Health Summit by presenting *A Survivor's Guide to Health Information Technology*. Committee members shared their experiences implementing health IT systems.

2007 Health IT Innovators Recognition

The Health IT Adoption Committee also selected the recipient of the Health IT Innovators Recognition Award presented at the 2007 e-Health Summit by Kentucky's Lieutenant Governor. The individual award was given to Dr. Haas of the Department of Corrections and the organization award was given to the Department of

Corrections. Dr. Haas and the Department of Corrections were selected for their innovative combination of Telehealth and an Electronic Medical Record.

Physician Adoption Toolkit

A subcommittee developed the content for a health IT adoption provider toolkit. The group envisioned this as a web-site focused on electronic medical record implementation in the physician's office.

Health IT Adoption Statewide Study

The Health IT Adoption Committee provided review of and input to the Statewide Study completed by the University of Kentucky under a contract with the Cabinet for Health and Family Services. The committee also provided input into the design of the study and suggestions on how to encourage provider response and outreach to providers.

Medical Trading Area Analysis

The Health IT Adoption Committee provided review of and input to the Medical Trading Area analysis completed by the University of Louisville under a contract with the Cabinet for Health and Family Services. The Committee reviewed the data gathered as the basis for the report and provided a real-world review of the Medical Trading Areas defined.

Suggested Future Activities to Encourage Provider Health IT Adoption

The Health IT Adoption Statewide Study identified two key issues impacting health IT adoption. These included financial barriers and lack of access to technical support.

The Committee suggested the following strategies to address both issues:

- Allow providers to purchase under the Kentucky Information Highway 2 (KIH2) contract to reduce the costs of connectivity;
- Form an organization to provide group purchasing of systems (hardware and software) and to provide group purchasing of IT technical support services; and
- Establish a users group to assist providers with selection and on-going optimization of health information technology.

The Health Information Exchange Committee (originally called the Electronic Data Interchange Committee) is charged with assisting the development of new regional health information organizations and local health information exchanges (RHIOs/HIEs) and addressing collaborative issues related to health information exchange in Kentucky.

Over the past year, the Health Information Exchange (HIE) Committee participated in the following activities.

Survey of existing health information exchange efforts in Kentucky

In an effort to understand the business models and underlying philosophy of existing health information exchange efforts in Kentucky, the HIE Committee hosted presentations from an executive of HealthBridge in Northern Kentucky and an executive of the Louisville Health Information Exchange (LouHIE).

Survey of existing health information exchange efforts in other states

In a joint meeting with the Economic Development Committee, the HIE Committee reviewed the progress of Tennessee's e-Health Initiative with a presentation from the Assistant Director of the eHealth Initiative.

Review of statewide Health Information Technology Adoption and Medical Trading Area studies

Jointly with the Health Information Technology Adoption Committee, the HIE Committee received updates on and provided review of two major statewide heath information-related studies:

- *Health Information Technology Adoption by Kentucky Health Care Providers* by Dr. Carol L. Ireson, RN, PhD, Associate Professor College of Public Health University of Kentucky and Dr. Martha Riddell, DrPH, Assistant Professor College of Public Health University of Kentucky; and
- *Medical Trading Area Analysis Project* by Ray Austin, PhD, Department of Health Management and Systems Sciences School of Public Health and Information Sciences and Carol Hanchette, PhD, Department of Geography and Geosciences, School of Arts and Sciences, University of Louisville.

The Privacy and Security Committee is charged with providing recommendations to the Kentucky e-Health Network Board on Health Insurance Portability and Accountability Act (HIPAA) compliance and other privacy and security protections needed for board projects as well as working collaboratively across organizations implement recommendations from the Health Information Privacy & Security Collaboration (HISPC).

e-Health Initiatives

e-Health Initiatives Summary

A summary of e-health initiatives of the Kentucky e-Health Network Board from December 2007 until January 2009 is outlined below and detailed on the following pages. Please note that some of these activities are ongoing and may have spanned multiple years.

Initiatives	Start Date	Completion Date	Scheduled Completion Date
e-Prescribing Partnerships in Kentucky Grants – Round I & Round II	2006	Dec. 2008	
Statewide Study on Health Information Technology Adoption	Sept. 2007	July 2008	
Medical Trading Area Analysis	Sept. 2007	Oct. 2008	
Medicaid Transformation Grant	Feb. 2007		March 2010
Health Information Security and Privacy Collaborative	2006		July 2009
Harmonizing State Privacy Law Multi-State Collaborative	April 2008		July 2009
Provider Education Toolkit (PET)	April 2008		July 2009
Second Annual E-Health Summit	Dec. 2007	Dec. 2007	

e-Prescribing Partnerships in Kentucky Grants

The Cabinet for Health and Family Services offered two rounds of e-prescribing grants in partnership with the Governor's Office of Local Development (GOLD), which served as the fiscal and administrative agent of CHFS for the Grant Program.

Round I Summary

The first round of e-prescribing grants was offered in 2006 by Kentucky CHFS. Funding in the amount of $300,000 for the first round of e-prescribing grants was provided by the Foundation for a Healthy Kentucky and the Hal Rogers Grant that supports the Kentucky All Schedule Prescription Electronic Reporting (KASPER) Program. The Foundation for a Healthy Kentucky is a non-profit organization that seeks to address the unmet health care needs of Kentucky. A summary of the grantees and the scope of the project is presented in Table 1. The geographical distribution of the grantees is included in Figure 1.

County	Grantee	Project Scope
	Baker Family Care	Implement an Electronic Medical Record (EMR) system that includes e-prescribing.
	Kentucky Primary Care Association, Inc.	Implement e-prescribing at 5 clinics
	University of Kentucky North Fork Valley Community Health Center	Implement an EMR system that includes e-prescribing.
	St. Claire Regional Medical Center	Implement e-prescribing at 5 primary care clinics associated with St. Claire Regional Medical Center.
	Clinton County Hospital, Inc.	Implement an EMR system with e-prescribing in four physician offices.

Table 1.

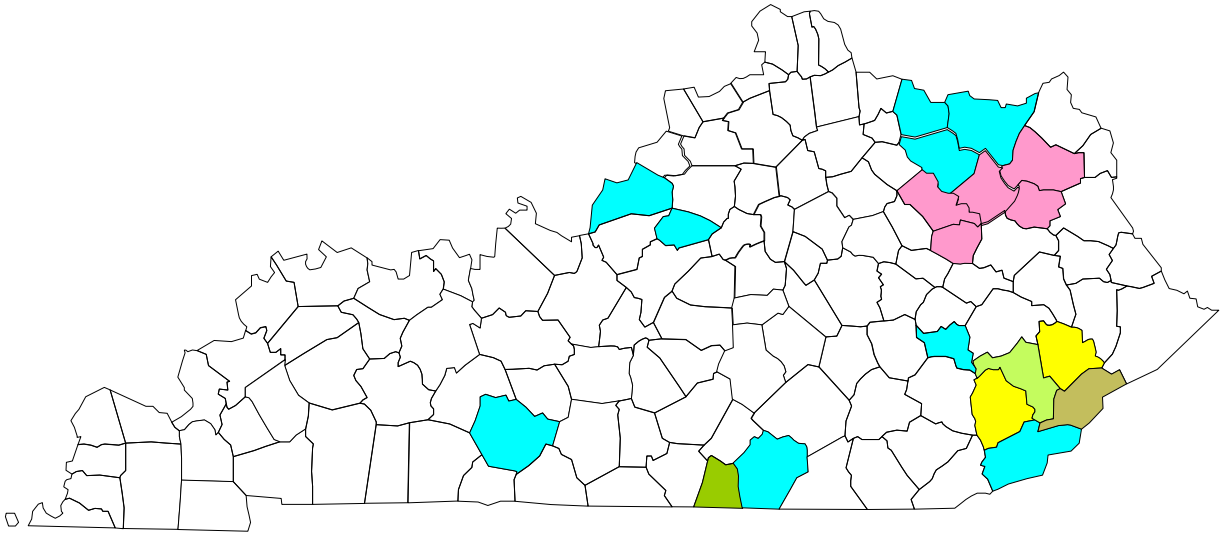


Figure 1.

Round II Overview

Considering the success of the e-prescribing round I grants, the CHFS provided funds for a round II of e-prescribing grants. In round II, the cabinet distributed $335,000 in e-prescribing grants using the same guidelines used in round I. The round II grantees benefited from the lessons learned during round I.

The goals of the second round of the grant program were to:

1. Encourage health information technology (HIT) adoption in Kentucky by making HIT adoption more affordable; and
2. Develop relationships and work patterns that support electronic information sharing among health care entities such as physician offices and local pharmacies.

Round II Project Achievements

Table 2 summarizes the Round II grantees and the scope of each project. The counties impacted are shown in Figure 2 below.

County	Grantee	Project Scope
	Community Family Clinic	Implement an EMR including e-prescribing with Menifee County Pharmacy.
	Kentucky Primary Care Association, Inc.	Implement e-prescribing at 11 clinics, 50 providers.
	HealthBridge	Implement e-prescribing at 3 clinics, 90 providers.
	Family Medical Center of Hart County	Implement an EMR that includes e-prescribing with Rite Aid and Clarks Pharmacy.
	Appalachian Regional Healthcare	Implement e-prescribing as the first step toward an EMR at 2 clinics, 16 providers.

Table 2.

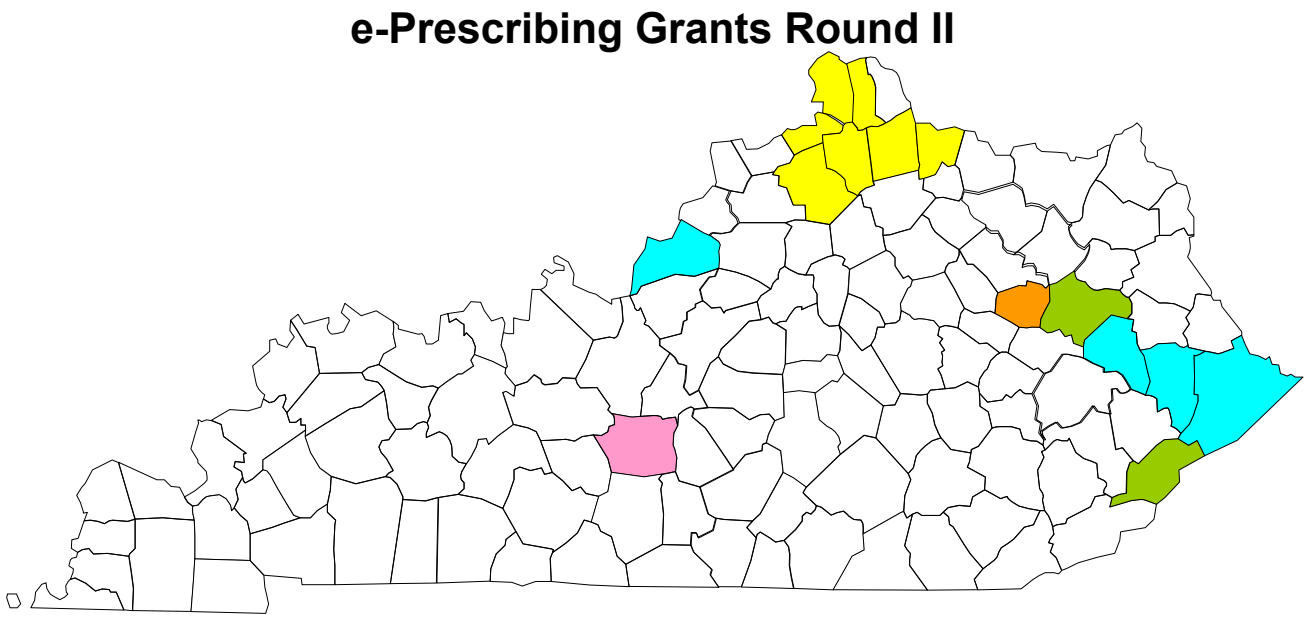


Figure 2.

Round II e-prescribing grants supported the grantees in implementing e-prescribing, an important component of Health Information Technology (HIT), across widely distributed areas of Kentucky. Some of the grantees implemented e-prescribing as a first step toward eventual use of an electronic medical records (EMR) system while some of the grantees implemented e-prescribing as part of a complete EMR system. At the time of the grant final reports, all grantees were successfully using an e-prescribing system.

Round II Outcomes

Community Family Clinic implemented an EMR including e-prescribing with Menifee County Pharmacy. The project was very positive for the practice. The clinic is now able to send electronic prescriptions to pharmacies up to 60 miles away and has reduced time spent on charting and updating client data. No technical or procedural issues were reported.

The clinic noted that when a patient visits the office for the first time, it takes longer to set-up the initial patient record than it did when the patient record was recorded on paper. However, after most of the clinic's clients have an established electronic medical record, continued use is not causing any negative work-flow.

Family Medical Center (FMC) of Hart County implemented an EMR including e-prescribing through SureScripts to local pharmacies and an interface to the clinic lab. FMC is starting to see the rewards of implementing an EMR. Providers are now using automatic prescription recommendations rather than using text medication references. This has provided a reduction in prescription errors. Treatment documentation is now more accurate leading to more accurate coding. Billing is now faster and lab productivity has improved.

FMC was disappointed with the selected software functionality. However, the biggest challenge noted has been the length of time required to set-up the electronic record for a new patient including medical and family history (up to two hours). They began to see gains in productivity on return visits once the electronic patient record was established.

The Kentucky Primary Care Association (KPCA) implemented an Application Service Provider (ASP) model e-prescribing program at two KPCA member organizations; Family Health Centers in Louisville and Big Sandy Health Care. The same application, which allows electronic prescribing over an internet connection, was implemented at both organizations.

Family Health Centers reported that some technical issues occasionally cause the ASP vendor internet servers to slow, causing workflow problems and frustration on the part of providers. Family Health Centers expressed the concern that the selected application does not have the capacity to handle a multi-site, complex clinic like the Family Health Centers. The major procedural issue reported is the inability to use electronic prescribing for controlled substances, which is prohibited by federal law at this time.

Family Health Centers reported that electronic prescribing allowed them to streamline the prescription refill process.

Big Sandy Health Care also reported that the application, although easy to use, has some technical problems that cause the providers to hand write some prescriptions on a daily basis. Big Sandy Health Care also noted the limitation of not being able to use electronic prescribing for controlled substances.

Big Sandy Health Care reported that prescriptions to be filled by their internal pharmacies transfer electronically into the ambulatory pharmacy system used; this has provided a major workflow improvement between Big Sandy providers and pharmacies. In addition, medication lists are used to identify patient treatment compliance patterns. HealthBridge expanded their existing clinical messaging system to include electronic prescribing. The initial

pilot provider groups included Cardiology Associates of Northern Kentucky and Internal Medicine Associates of Northern Kentucky and Patient's First.

HealthBridge included an expert medication database (Medi-Span) and incorporated the Medicaid Formulary into the system as part of the project. At the conclusion of the project, all three practices are using the electronic prescribing product. HealthBridge expects to see improved patient care quality as practices use these tools. Over the next year, HealthBridge will monitor the usage of name brand and generic medications for Medicaid patients.

Appalachian Regional Healthcare (ARH) implemented the electronic prescribing portion of an EMR system at two clinics. The complete EMR functionality will be implemented at these clinics in the future; in this case electronic prescribing is the first step toward full EMR usage.

ARH loaded patient medication histories, problems and allergies into the e-prescribing system before they went live. Pre-loading the patient history eliminated the daily care delivery workflow problem of loading each patient when that patient presents, and it facilitates early benefits realization as the practitioner has the patient history available for care immediately.

ARH reported improved documentation of patient medications as the major business process improvement achieved. They also have seen improved patient safety as all electronic prescriptions are screened for interactions and allergies automatically.

Statewide Study on Health Information Technology Adoption

The Cabinet for Health and Family Services (CHFS) contracted with the University of Kentucky to conduct a statewide study to establish a baseline on the level of health IT adoption by healthcare providers across the Commonwealth. The findings of this research were reported in *Health Information Technology Adoption by Kentucky Health Care Providers*. An additional report, EHR Systems Used by Health Care Providers, specified EHR system and vendor by county.

The surveys, developed by faculty of the University of Kentucky, were designed to be completed in 10 minutes. Input on the survey content and consultation on soliciting responses was provided by the Kentucky e-Health Network Board Health Information Technology Adoption Committee. A University of Kentucky Institutional Review Board (IRB) process was completed. The Cabinet for Health and Family Services (CHFS) IRB determined that there was no need for the study to be approved by the CHFS IRB.

The cross-sectional study included:

- Mailed surveys to a sample of licensed physicians (MDs and DOs) actively practicing in Kentucky; and
- Electronic surveys of pharmacists, hospitals, home health agencies, hospices, long term care facilities, optometrists, podiatrists, mental health programs, Kentucky Primary Care Association members, medical group practice managers, and health departments.

The survey results were balanced against existing surveys completed by the Medical Group Management Association and the Kentucky Academy of Family Practice Physicians. Face to face stakeholder interviews with selected members of the health care provider groups included in the study provided additional information about health information technology use in various regions of Kentucky. Table 3 provides a listing of the professional organizations that participated with the survey distribution and in soliciting responses.

Kentucky Medical Association	Kentucky Association of Homes & Services for the Aging
Kentucky Hospital Association	Kentucky Health Department Association
Kentucky Pharmacy Association	Kentucky Primary Care Association
Kentucky Home Health Association	Kentucky Medical Group Management Association
Kentucky Hospice Association	Kentucky Podiatric Association
Kentucky Association of Regional Programs	Kentucky Optometric Association
Kentucky Association of Health Care Facilities	

Table 3.

The conclusions of the Statewide Study were:

- Hospices are the most wired of all provider groups;
- Rural physicians are as wired as their urban colleagues;
- Small practices are less wired than larger ones;
- Certain regions of the state seem to have a wired synergy beginning; and
- Broadband is widely available to all providers.

A copy of the reports and all the associated data were sent to the Kentucky Department for Libraries and Archives. Both complete reports resulting from this effort are available on-line at www.ehealth.ky.gov.

Medical Trading Area Analysis

The CHFS contracted with the University of Louisville School of Public Health and Information Sciences to analyze claims and discharge data to define Medical Trade Areas (MTA) for the Commonwealth of Kentucky. The MTAs were mapped using a Geographical Information System (GIS). Faculty of the University of Louisville Department of Geography and Geosciences provided the mapping and GIS expertise for this project.

The goal of the analysis was to determine where citizens of Kentucky go to receive medical care. Data from 2006 was used to ensure complete data sets from all sources. Two types of data were used in this analysis:

1. De-identified claims data from Medicaid, Anthem Blue Cross Blue Shield, Bluegrass Family Health and Humana ; and
2. De-identified hospital inpatient discharge data from the Kentucky Hospital Association.

In all nearly 72 million records representing county of origin and county of destination were used in this analysis to identify patient flow to receive medical care.

The researchers recommended that all 120 Kentucky counties serve as the unit for the GIS analysis. Since Kentucky counties are all fairly small, this provided a good level of granularity. Since county is one of the identifying data points protected by HIPAA; the study was submitted to both the CHFS and the University of Louisville Institutional Review Boards to ensure appropriate use of data.

The GIS used was the University of Louisville ARCGIS system. The GIS input data was obtained and archived at the end of the contract so the data could be if further analysis is conducted in the near future.

A copy of the report and all the associated data was sent to the Kentucky Department for Libraries and Archives.

The complete Medical Trade Area report is available on-line at www.ehealth.ky.gov. A map and listing of the Medical Trade Areas is presented in Figure 3. Medical trading areas, counties and population data is presented in Table 4.

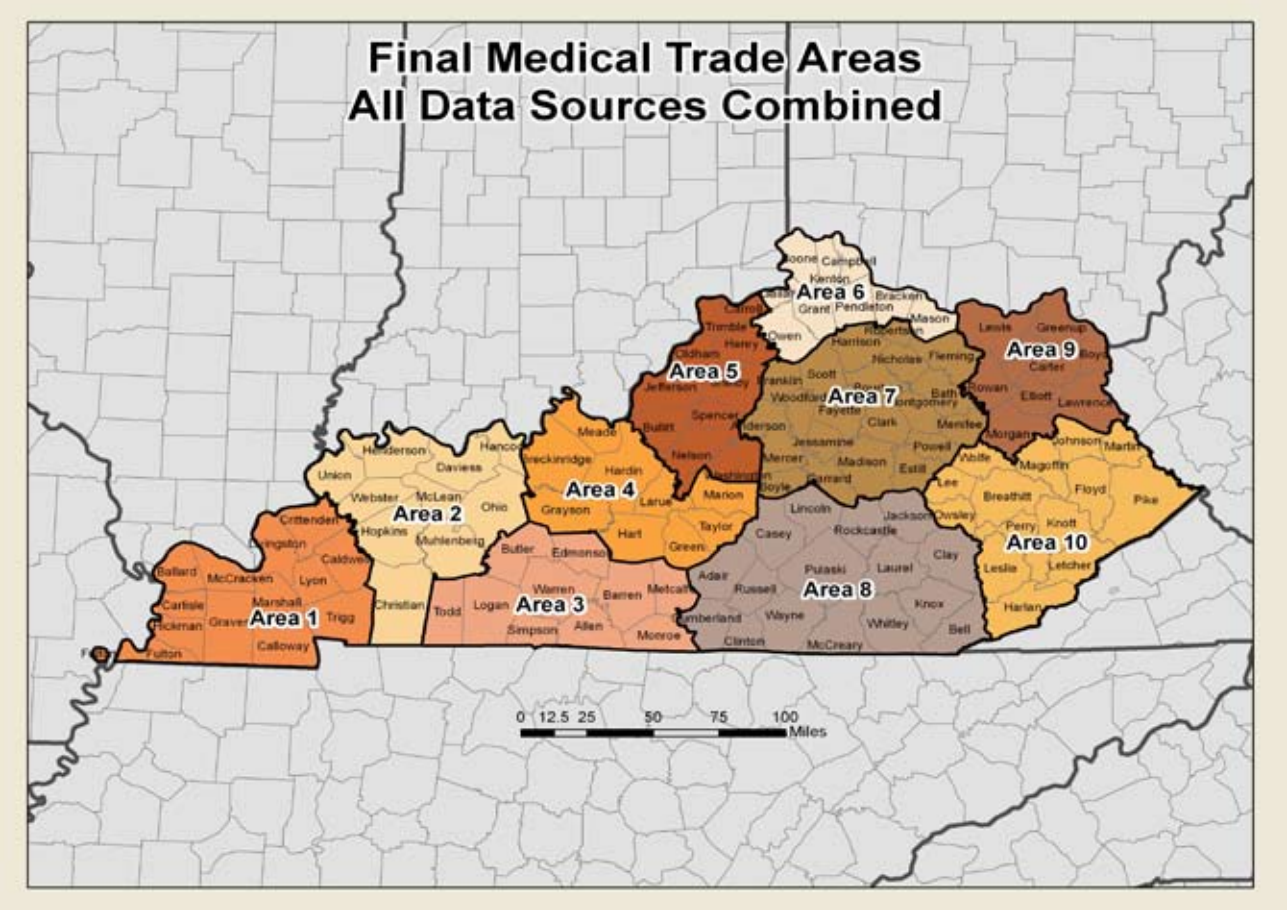


Figure 3.

MTA	Counties	Total Population
1	Ballard, Caldwell, Calloway, Carlisle, Crittendon, Fulton, Graves, Hickman, Livingston, Lyon, Marshall, McCracken, Trigg	247,236
2	Christian, Daviess, Hancock, Henderson, Hopkins, McLean, Muhlenberg, Ohio, Union, Webster	365,255
3	Allen, Barren, Butler, Edmonson, Logan, Metcalfe, Monroe, Simpson, Todd, Warren	264,510
4	Breckinridge, Grayson, Green, Hardin, Hart, Larue, Marion, Meade, Taylor	254,864
5	Bullitt, Carroll, Henry, Jefferson, Nelson, Oldham, Shelby, Spencer, Trimble, Washington	974,175
6	Boone, Bracken, Campbell, Gallatin, Grant, Kenton, Mason, Owen, Pendleton	435,859
7	Anderson, Bath, Bourbon, Boyle, Clark, Estill, Fayette, Fleming, Franklin, Garrard, Harrison, Jessamine, Madison, Menifee, Mercer, Montgomery, Nicholas, Powell, Robertson, Scott, Woodford	770,892
8	Adair, Bell, Casey, Clay, Clinton, Cumberland, Jackson, Knox, Laurel, Lincoln, McCreary, Pulaski, Rockcastle, Russell, Wayne, Whitley	399,770
9	Boyd, Carter, Elliot, Greenup, Lawrence, Lewis, Morgan, Rowan	187,012
10	Breathitt, Floyd, Harlan, Johnson, Knott, Lee, Leslie, Letcher, Magoffin, Martin, Owsley, Perry, Pike, Wolfe	304,871

Table 4.

Medicaid Transformation Grant

In January 2007, the Kentucky Cabinet for Health and Family Services was awarded a Medicaid Transformation Grant (MTG) from the Centers for Medicare and Medicaid Services to initiate health information technology for enhancing health care delivery to Medicaid members.

The Medicaid Transformation Grant will provide the seed funding for the implementation of the Kentucky Health Information Exchange and a Request for Proposals was released in December, 2008. The board heard presentations on the progress of the grant at intervals during the year.

Health Information Security and Privacy Collaborative

In May 2006, Kentucky was one of 33 states awarded a contract to participate in the Health Information Security and Privacy Collaboration (HISPC), a federally-funded collaboration involving the Office of the National Coordinator, the Agency for Healthcare Research and Quality, Research Triangle Institute (RTI), and the National Governors Association. The goal of the project was to assess, at the state and local levels, how privacy and security practices and policies affect health information exchange (HIE). The Commonwealth's HISPC Working Group produced a detailed action plan: *Kentucky e-Health Privacy and Security Collaboration: Final Implementation Plan Report*.

In 2007, with Phase 2 continuation funding for action items identified in the Kentucky's implementation plan, the Commonwealth chose to complete work on the Kentucky Statute and Regulation HIPAA Pre-emption Analysis, and to develop privacy and security educational materials for health care providers.

As a result, the 2007 e-Health Summit included a session on HIPAA Privacy and Security Basics with continuing Medical Education credits available for participation. The training was designed and delivered by the University of Louisville. The same training was conducted for Cabinet for Health and Family Services personnel.

Harmonizing State Privacy Law Multi-State Collaborative

Phase 3 HISPC funding has provided the opportunity for Kentucky to become a member the Harmonizing State Privacy Law Collaborative (HSPLC), a multi-state collaborative that includes Florida, Kansas, Michigan, Missouri, New Mexico, and Texas. Kentucky's HSPLC legal working group is chaired by the University of Kentucky.

The HSPLC has developed an assessment matrix, a common organizational structure, to categorize health information laws within the context of HIE uniformly. The HSPLC has also drafted a general methodology to allow states, in a systematic and analogous manner, to refine individual HIE goals and barriers that need to be addressed by ranking their laws based on criticality to the HIE development for that individual state.

Once the methodology development is complete, it will be made available nationwide so other states will be able to use it to rank and focus on the laws within their own states that may need to be addressed. Collaborative work will continue through the end of March, 2009.

Provider Education Toolkit (PET)

The Provider Education Toolkit (PET) Multi-State Collaborative, aims to provide educational resources for health care providers interested in understanding electronic health information exchange and security and privacy best practices. Kentucky worked collaboratively with Florida, Louisiana, Michigan, Mississippi, Missouri, Tennessee and Wyoming in the effort to raise awareness in each state's health care community.

The major product of the collaborative was a web-based toolkit, located at www.Secure4Health.org. It provides physician-to-physician advice, resource links, and answers to frequently asked questions from national health care subject-matter experts. Information is focused on electronic health information exchange and related privacy and security implications as well as the tools and resources to help providers get connected electronically. Physicians can also earn free continuing medical education credits while learning more about electronic health information exchange and electronic health record systems.

Kentucky's Lieutenant Governor Daniel Mongiardo served as a physician champion for the project and is featured in a video segment on the website.

Second Annual e-Health Summit

The Second Annual e-Health Summit held in Lexington on December 6th and 7th of 2007 allowed the 250 attendees to explore the current state of e-Health in Kentucky and to discuss the future direction of e-Health.

Plenary speakers included e-Health advocates from across the country as well as Kentucky e-Health experts. Plenary speakers included:

- Chris Downing, Region IV Director, United States Department for Health and Human Services;
- Michael Heekin, CEO, Georgia Health Information Exchange, Inc.;
- Dr. Marc Overhage, President and CEO, Indiana Health Information Exchange;
- Keith Hepp, CFO and VP of Business Development, HealthBridge; and
- Miriam Paramore, Chair, Louisville Health Information Exchange.

Over lunch, Kentucky's Lieutenant Governor Daniel Mongiardo presented:

- Electronic prescribing grants; and
- The Health IT Innovators Awards.

Several of the afternoon breakout sessions were presented by Kentucky e-Health Network Board Committees:

- The Privacy and Security Committee presented Privacy & Security training;
- The Health Information Technology Adoption Committee presented a round table discussion on provider experiences implementing electronic health records; and
- The Economic Development Committee presented a session on developing a robust e-Health economy in Kentucky.

Other topics covered in the afternoon breakout sessions included training on Kentucky's eKASPER system, a round-table discussion on electronic prescribing, an overview of Federal, State and Local e-health initiatives, and a discussion on the university role in health IT innovation

Attendee feedback on the Summit was positive with all attendees agreeing that the summit provided a benefit by fostering an exchange of ideas. On a scale of 1 to 4 where 4 is highest, the average attendee rating was 3.7.

Board Meetings Summary

Over the course of 2008, the Kentucky e-Health Network Board received updates on the following on-going activities:

- Reports on the activities of the Board Committees: Health Information Exchange, Privacy and Security, Health Information Technology Adoption and Economic Development;
- e-Prescribing Round II Grants;
- Health Information Security and Privacy Collaborative;
- Medical Trading Area analysis;
- The Statewide Study on Health Information Technology Adoption; and
- Health Care Infrastructure Authority activities including Strategic Planning Retreat held July 10.

The Board also heard final reports on the following activities as they were completed:

- The December 2007 e-Health Summit;
- e-Prescribing Round I Grants;
- e-Prescribing Round II Grants;
- Medical Trading Area analysis; and
- The Statewide Study on Health Information Technology Adoption.

The Board heard presentations on the following topics:

- *Kentucky Behavioral Telehealth Network* presented by the Director of Adult Services, Kentucky Community River Care;
- *Louisville e-Health Survey 2007* presented by the University of Louisville School of Public Health;
- *Health Information Technology Initiatives: A National Perspective* presented by the State Alliance for e-Health, National Association;
- *Physician Practice EMR Implementation* presented by Primary Care Medical Center in Murray, Kentucky;
- *Patient-Centered Primary Care Collaborative* presented by the Kentucky Academy of Family Physicians.

Detailed descriptions of each presentation follows:

Kentucky Behavioral Telehealth Network

A staff member of Kentucky River Community Care presented an overview of the Kentucky Rural Behavioral Health Pilot Project funded by a $3.3M from the Federal Communications Commission. The Kentucky River Community Care Association (KRCC) will become a model site for rural behavioral health care. This project will include connecting behavioral health care providers throughout the state. The funding from the Federal Communications Commission for the first year will be used to analyze the network requirements and system design. The KRCC is will link behavioral health providers, major hospitals, and state mental hospitals to this network.

Greater Louisville e-Health Survey 2007

A representative of the University of Louisville presented an overview of the findings from the Greater Louisville e-Health Survey 2007. This research was funded by the Louisville Health Information Exchange (LouHIE) and additional funding and sponsorship was provided through the CHFS to incorporate state perspectives. The research was led by Noblis and was done collaboratively among the University of Louisville, Louisville Health Information Exchange and Noblis.

The overall objective was to gain a level of understanding about consumers and organizations' wants, needs, interests and perceived benefits and level of interest to participate with a community-wide health record bank in the Louisville area.

Health Information Technology Initiatives: A National Perspective

A staff member of the National Governors Association, State Alliance for e-Health, presented an overview on the health information technology landscape on the national level. The Centers for Best Practices is considered the consulting arm of the organizations for states identifying models and best practices. A survey was conducted that identified what states were doing in the areas of priorities, health initiatives underway, various obstacles and challenges, and lessons learned. The highest priority was the development of health information exchange. A big issue that was discovered is that there is variation in definition. Funding is a significant barrier to accomplishing state e-health priorities. A currently available resource on state's information technology financing is the National Conference of State Legislatures Health Information Technology Champions (HITCH) located at http://www.hitchampions.org.

Physician Practice Electronic Medical Record Implementation

A physician and a staff member from the Primary Care Medical Center in Murray, Kentucky presented on their Digital Medical Office. The group practice, consisting of ten physicians and five mid-level providers, was faced in 1999 with keeping patients and multiple medication records accurate and up to date, inadequate space for paper medical records, managing a large volume of prescription refills, and opening a new satellite office in Benton. The only acceptable solution to these problems was the implementation of an EMR.

Significant increases in efficiencies have resulted with the EMR implementation. These include the enhancement the patients' quality of care, the reduction in the likelihood of medical errors, the improvement in financial performance, the enhanced perception of the practice, and the increased pride and satisfaction of the employees and physicians.

Statewide IT Assessment Final Report

Researchers from the University of Kentucky presented the final report of the HIT Assessment for the Commonwealth. The goal of the study was to provide baseline information to assist in the development of health information exchanges in Kentucky.

The objectives of the HIT adoption assessment were to identify:

- Which providers across Kentucky are using health information technology;
- What technology is used;
- For what purposes the technology is used; i.e., electronic billing, electronic medical records, communications with other providers, and/or communication with patients;
- Perceived benefits of HIT;
- Barriers to HIT adoption;
- What providers need to increase their use of health information technology; and
- How Kentucky should move forward to an electronic health information environment

Cross-sectional study included: mailing surveys to a sample of licensed physicians practicing in Kentucky; electronic surveys of pharmacists, hospitals, home health agencies, hospices, long term care facilities, optometrists, podiatrists, mental health programs, KPCA members, medical group practice managers, and health departments; and face-to-face stakeholder interviews with selected members of the health care providers.

Major Findings:

- Physician access to hospital EHRs is common;
- Patient access to their personal health information is limited;
- Connectivity across state borders is critical for providers in several healthcare organizations;
- e-prescribing is not a common practice;
- HIE is occurring in selected communities; and
- Solo and smaller physicians practices and smaller hospitals may be underrepresented in this survey because they have no plans for EHRs.

Conclusions:

- Hospices are the most wired of all provider groups
- Rural physicians are as wired as their urban colleagues
- Small practices are less wired than larger ones
- Certain regions of the state seem to have a wired synergy beginning
- Broadband is widely available to all providers

Medical Trading Areas Final Report

Researchers from the University of Louisville School of Public Health and Information Sciences presented the final analysis of the Medical Trading Areas Study. Data for this study included the Kentucky Medicaid Program, the Kentucky Hospital Association (KHA), and commercial insurers Humana, Anthem Blue Cross Blue Shield and Bluegrass Family Health. The outcome from this study will assist the Board with the facilitation of the exchange of electronic information. Information will be provided to assist in the development of regional health information organizations which will become the focal point for the electronic exchange of health information. The main focus of this project is to identify the geographic origin of patients and the geographic area served by various providers. County was used for the geographic unit of analysis. Fee for service data for 2006 was utilized but did not include the Passport data. Cross-border data for Kentucky patients was received from KHA patient origin data which identified who was entering the state. Commercial insurance data included claims records of over 6,000 from Medicaid, 600,000+ from KHA, 1 million from Anthem, 107,000 from Bluegrass Family Health, and over 15 million from Humana. From this data, a regionalization scheme was developed to identify regions that were medical trading areas based on the patient origin and destination data. The Passport data was not included in the initial analyses because Passport is a managed care program which directs people to specific areas instead of natural patterns of flow. Stakeholders should review the report and provide feedback for further analyses. Next steps will be to overlay the data from the Health IT Adoption Study with the Medical Trading Areas data for health information exchange.

Patient-Centered Primary Care Collaborative

A former President of the American Academy of Family Physicians and a private practice family physician from Ashland Kentucky and the Executive Vice President of the Kentucky Academy of Family Physicians presented The Patient Centered Primary Care Collaborative. The collaborative is a coalition of major employers, consumer groups, organizations representing primary care physicians, and other stakeholders who have joined to advance the patient centered medical home.

A patient-centered medical home integrates patients as active participants in their own health and well-being. Patients are cared for by a personal physician who leads the medical team that coordinates all aspects of preventive, acute and chronic needs of patients using the best available evidence and appropriate technology. These relationships offer patients comfort, convenience and optimal health throughout their lifetime.

Board Membership

Lee T. Todd, Jr., Ph.D., became the 11th president of the University of Kentucky (UK) on July 1, 2001. He is a native of Earlington and a graduate of UK and the Massachusetts Institute of Technology. President Todd is the fourth UK alumnus to hold the presidency and the first to earn an undergraduate degree from UK. He is a former UK engineering professor; a successful businessman who launched two worldwide technology companies, both based in Kentucky; and a public advocate for research, technology and an entrepreneurial economy in the Commonwealth. President Todd currently chairs the Southeastern Conference Committee on Academic Initiatives, serves on the American Council of Education Commission on Women in Higher Education, is involved with the Business Higher Education Forum, and is a member of the Council on Competitiveness. He chairs the Commission on Outreach and Technology Transfer for the National Association of State Universities and Land-Grant Colleges (NASULGC), and is also a member of the Science and Mathematics Education Task Force, a national committee that reports to the Secretary of Energy.

Carol Steltenkamp, M.D., MBA (Proxy for University of Kentucky) is a board-certified General Pediatrician with experience in private practice and traditional academic medicine. Dr. Steltenkamp received a B.S. from Xavier University in Cincinnati, OH and an M.D. from the University of Cincinnati. After completing her MBA at UK, she became particularly interested in healthcare information technology and financing and their impact on her ability to provide the highest quality of care for her patients. Dr. Steltenkamp is currently the Chief Medical Information Officer for UK HealthCare where they have become national leaders in the deployment of the electronic health record.

James R. Ramsey, Ph.D. was named the 17th president of the University of Louisville (UofL) on November 14, 2002. He serves as professor of economics and public administration in the College of Business and Public Administration. Prior to his appointment at UofL, he was Governor Patton's senior policy advisor and state budget director. Ramsey has held professional positions at the University of North Carolina-Chapel Hill, Western Kentucky University, Middle Tennessee University and Loyola University. He is an accomplished scholar and teacher, with more than 60 publications in the fields of economics and management. He received his Ph.D. in economics from the University of Kentucky and his undergraduate degree from Western Kentucky University. Ramsey is married and has two daughters.

Larry Cook, M.D. (Proxy for University of Louisville) is executive vice president for health affairs at the UofL. He is the executive officer for UofL's Health Sciences Center, which includes the Schools of Medicine, Nursing, Dentistry and Public Health as well as 17 centers and institutes. Under his leadership, a broad-based committee completed a campus master plan designed to take the Health Sciences Center to the next level over the course of the next two decades. The plan was approved by the university's Board of Trustees in February, 2007. Also in 2007, a consortium of UofL faculty medical and dental practices broke ground for a state-of-the-art faculty practice building located on the downtown Health Sciences campus. This facility, slated for completion in early 2008, will provide a multi-disciplinary practice environment designed for an optimal patient experience. Dr. Cook joined the UofL faculty in 1974 after completing his pediatric residency at the University of Colorado Medical Center and his neonatology fellowship at UofL. He was named chair of the pediatrics department and chief of staff at Kosair Children's Hospital in 1994. Under his leadership, the department increased NIH research support from $570,611 in 1996 to $3.7 million in 2003, rising from 70th to 43rd in the national rankings of pediatrics departments. He is former president and chairman of the School of Medicine's practice plan board and the Medical School Practice Association. He is chairman of the board and has been instrumental in the development of University Health Care Inc., a Medicaid managed-care HMO, known as Passport, responsible for more than 135,000 insured in 15 countries.

Barbara Haunz Asher, is the citizens-at-large representative and works in pharmaceutical sales for AstraZeneca International. She is a native of Oldham County, graduated from Centre College and resides in Prospect.

Jim Barnhart, (Proxy for the Commonwealth Office of Technology)

David J. Bensema, M.D., FACP, is a board certified internist who, after 16 years of private practice in Lexington, became the director of Baptist Physicians Lexington in August 2006. Bensema received a bachelor's degree in biology from the University of Kentucky in 1982, followed by his medical degree in 1986. Bensema continued his training at UK, completing his residency in internal medicine in 1989 and his chief residency in 1990. Bensama has helped to start three life insurance companies and in 2004 became board certified in insurance medicine. He is a past-president of the Lexington Medical Society and currently serves as the 10th District trustee of the Kentucky Medical Association. He and his wife, Dr. Marian Bensema, reside in Lexington and have two grown sons and two daughters-in-law, Michael and Lindsay Harrell, and Steve and Heather Harrell.

David Bolt, representing physician practice managers, is the chief operating officer for PrimaryPlus, a community health center which operates clinics in each of the counties in the Buffalo Trace regional in northeastern Kentucky. Based in Vanceburg, KY, PrimaryPlus implemented a fully functional EMR in 2001. Bolt has been involved in rural primary and acute care, as well as health professions education programs for 38 years. He holds both a bachelor's degree and master's degree from Morehead State University.

Ford Brewer, M.D., joined Toyota as medical director in 2000. A graduate of the Baptist College at Charleston and the Medical University of South Carolina, he completed his residency and received a master's degree in public health at Johns Hopkins University. He also serves on the faculty of the University of Kentucky Chandler Medical Center as chair of the Preventive Medicine Advisory Committee. Prior to joining Toyota, Brewer served as national medical director for Meridian Corporate Healthcare in Nashville, medical director for National Health Services, Inc. in New York City, director of the Preventive Medicine Residency Program at Johns Hopkins, and chief medical officer for the Maryland Department of Corrections.

Murray B. Clark, Jr., is currently the Associate Vice President of Health Affairs, Healthcare Facilities, UK HealthCare. Mr. Clark is responsible for the design and construction and the operational planning for the new Chandler Hospital at the University of Kentucky, and for all clinical facilities development for UK HealthCare. Mr. Clark has been in Healthcare for 36 years, 29 years of which have been at UK. Since joining UK in 1980 he has held several positions in Finance and serviced as the Chandler Hospital CFO for 19 years. Prior to his current appointment he served as the Chandler Hospital Director for four years.

Sharon P. Clark, a 17-year veteran of Kentucky state government, has been appointed commissioner of the Department of Insurance (DOI). Commissioner Clark was the first director of DOI's Consumer Protection and Education division, a position she held for 5 years. Under her leadership, the Department hired its first ombudsman, added consumer education and outreach functions, and strengthened enforcement efforts by expanding the number of consumer complaint investigators. Most recently, she worked at the Finance and Administration Cabinet. She also held positions for the Kentucky House of Representatives, the Public Service Commission and the former Workforce Development Cabinet. Clark and her husband, Jon, live in Harrodsburg. They have two daughters and one granddaughter.

Deborah Clayton was named commissioner of the Department of Commercialization and Innovation, formerly known as the Office of the New Economy, in June 2005. Before being appointed to her current position, Clayton served as the founding executive director of the Charlotte (NC) Research Institute, a non-profit corporation established in support of the University of North Carolina at Charlotte. Clayton also served previously as the assistant director for the electron microscopy laboratory at the University of Alabama, co-founder and COO of a high-tech start-up firm in Chicago, and manager of operations for the Argonne National Laboratory's (ANL) Office of Technology Transfer. She has a bachelor's degree in biology from Tulane University and Newcomb College and a master's degree in higher education administration from the University of Alabama.

Richard A. Crofts, Ph.D. of Palmetto, Fla., has nearly 40 years of experience in higher education leadership. A graduate of Fern Creek High School in Louisville and Georgetown College, Crofts holds a doctorate in reformation history from Duke University. Before becoming the interim president of the Council on Postsecondary Education in 2008, he served as interim commissioner of higher education in Mississippi, where he assisted the board in adoption of a new governance structure and led the system through the initial stages of recovery from Hurricane Katrina. He has also held positions as commissioner and deputy commissioner of higher education of the Montana University System, assistant to the chancellor of the Minnesota State University System, commissioner of the Western Interstate Commission for Higher Education and a member of the executive committee of the State Higher Education Executive Officers. Crofts also has served as vice president of academic affairs at Mankato State University, associate vice president for research and dean of the graduate school at East Tennessee State University and department chair and faculty member at the University of Toledo.

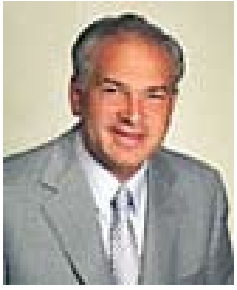
State Senator Julie Deaton, a Republican Senator from Louisville, KY in her thirteenth year, earned her Bachelor of Science degree from the University of Louisville. She is a dental hygienist and was previously a small business owner. In the Senate she serves as chairman of the Health and Welfare Committee and Vice chairman of Banking and Insurance. She is also a member of the Economic Development; Tourism, Labor and Industry committee, the Licensing and Occupations committee, Medicaid Oversight and Advisory Committee, and various task forces including the task force on the "Boni Bill." Senator Denton is married to Barry Denton, a Sergeant with the Louisville Metro Police Department, and has four children. She stays very busy with her legislative duties, community affairs, and the activities of her family. She is a member of High View Baptist Church. Senator Denton received the 1998 Guardian of Small Business Award from the National Federation of Independent Businesses for her success in passing legislation which allows 100 percent tax deductibility of health insurance premiums for all individuals and businesses. She also received the 1998 Legislator of the Year Award from the American Legislative Exchange Council. In 1997, she was awarded the Better Life Award from the Kentucky Association of Health Care Facilities for her work in the areas of Medicaid and long term care. In 2000, Senator Denton received the Carl D. Perkins Service Award from the ARC of Kentucky for her commitment to persons with mental retardation, and in 2002 she received the Star Award from the Brain Injury Association of Kentucky. In 2003 she received the Distinguished Public Service Award from the Kentucky Psychological Association for her advocacy for those with disabilities.

Rep. Bob W. DeWeese, M.D., born Nov. 8, 1934. General Surgeon. UK, BS. UofL, MD. Downtown Rotary Club of Louisville. Jefferson County Medical Society, past President and current Member. Louisville Surgical Society. Dr. Nathan Davis Award. American Medical Association.

William D. Hacker, M.D., was appointed acting commissioner of the Kentucky Department for Public Health in July 2004 and commissioner in November 2004. Hacker earned his bachelor's and medical degrees from the University of Kentucky and completed a pediatric residency at the UK Medical Center. He practiced pediatrics in Corbin for 18 years, served as chief medical officer for Appalachian Regional Healthcare, and held several positions in the Kentucky Department for Public Health before assuming the responsibilities of commissioner last year. Hacker is a native of Clay County, Kentucky, and he and his wife, Kaye, have 3 children and 5 grandchildren, all of whom live in Kentucky.

Elizabeth "Betsy" Johnson, was appointed commissioner of the Department for Medicaid in January 2008. Prior to joining Medicaid Services, Ms. Johnson was a Deputy Commissioner with the Department of Employee Insurance, helping to oversee the Kentucky Employees Health Plan. In her over thirteen years of state service, she has had the opportunity to work in all three branches of state government. In January 2003, she successfully argued the case of the Kentucky Association of Health Plans v. Miller before the United States Supreme Court. The decision in the Miller case upheld Kentucky's Any Willing Provider statute and also changed the analysis applied in ERISA preemption cases. Ms. Johnson received a bachelor's degree, with distinction, in political science from the University of Kentucky and a juris doctor from Temple University School of Law.

Bruce Klockars has served as president and CEO of Flaget Memorial Hospital in Bardstown since 2001. A graduate of McPherson College, he attained a master's degree in health care administration from Trinity University in San Antonio, Texas. Prior to joining Flaget, Klockars was senior vice president and COO of Saint Joseph Hospital in Lexington from 1990 to 2000, including a stint as interim president and CEO. He has also been a hospital administrator in Florida and Texas and a pilot in the U.S. Army. Klockars and his wife, Diane, have two sons, Jeff and Andrew.



Jack Lord, M.D., is senior vice president and chief innovation officer for Humana in Louisville. Lord joined Humana in 2000 to help develop the company's business strategy and direct the design and implementation of health plan products and clinical services. Lord is a board-certified forensic pathologist with 21 years' experience in medical practice. He began his medical career in the U.S. Navy, where he spent 11 years on active duty, most recently as director of quality assurance for the Naval Medical Command in the Office of the Surgeon General. As a consultant and surveyor for the Joint Commission on Accreditation of Healthcare Organizations, and through subsequent executive positions at SunHealth, Ann Arundel Medical Center, the American Hospital Association, and HealthDialog, Lord has become one of the nation's leaders in promoting innovation and quality improvement in health care. Lord received his medical degree from the University of Miami in 1978 and has received numerous academic appointments in his career, most recently as an adjunct professor of community and family medicine at Dartmouth Medical College. Lord has served on numerous boards and advisory panels, including a current position on the National Advisory Council for Healthcare Research and Quality, a prestigious appointment providing advice to the U.S. Secretary of Health and Human Services on national health policy and research priorities.

Janie Miller was appointed secretary of the Cabinet for Health and Family Services Gov. Steve Beshear in January 2008. Miller brings more than 30 years of experience to the position, including 21 years developing and administering health care programs. Her career also includes more than 15 years of service in the former state Cabinet for Human Resources. Prior to her appointment as secretary, Miller held the position of deputy director of budget review for the Kentucky Legislative Research Commission. In this role, she was responsible for assisting legislators in developing budget bills for all three branches of government. Under Governor Paul Patton, Miller served as Public Protection Cabinet Secretary from May 2002 to November 2003, continuing in the role of commissioner of the Kentucky Department of Insurance while serving as cabinet secretary. She also has served as commissioner of the Department of Insurance and as deputy commissioner of Health Insurance in the Department of Insurance. Miller has an undergraduate degree in social work from Eastern Kentucky University. Larry Mott, representing businesses with large-scale e-strategy and computer information technology, is an information technology project leader for UPS Airline with more than 20 years of experience in a variety of technical environments. He holds an associate's degree in business in Sullivan College and a master's certificate in project management from George Washington University.

Larry Mott, representing businesses with large-scale e-strategy and computer information technology, is an information technology project leader for UPS Airline with more than 20 years of experience in a variety of technical environments. Larry is also the Chair of the Strategic Planning Team of the e-Business Program of the Air Transport Association where he is also a member of the Steering Group responsible for developing industry standards for the electronic exchange of technical reference information related to the airline industry. He holds an associate's degree in business from Sullivan College and a master's certificate in project management from George Washington University.

Senator Katie Stine, Born December 6, 1956. Attorney/Homemaker. Episcopalian. University of Cincinnati, BS Northern KY University Chase College of Law, JD KY Bar Association. Ft. Thomas Weekday Religious Ed Program. Jr. League of Cincinnati. Episcopal Church Women. Ft. Thomas Garden Club. DAR. Homemakers Club. Taxpayers Best Friend, KY Taxpayers United. Guardian of Small Business. National Federation of Independent Businesses. Friend of Physical Therapy Award, KY Physical Therapists Association. Friend of the Merit Shop. Association of Builders and Contractors. Friend of Tobacco Farmers. Burley Tobacco Cooperative. Received highest rating in the Senate by KY Forward, a group representing small businesses in 2000.

Representative Tommy Thompson represents Ohio County and parts of Daviess County in the Kentucky House of Representatives. He is president of Thompson Homes, Inc. Thompson received his bachelor's degree from the University of Florida and his MBA from Indiana University. He has served on several boards including BB&T, Junior Achievement of Greater Owensboro, Cliff Hagan Boys and Girls Club, Leadership Owensboro, Brescia University Board of Trustees, and the local School-To-Work Program. He received the Mayor's Award for Excellence and was recognized as Outstanding Young Man of Owensboro. Thompson was named to the Outstanding Young Men of America, the Kentucky Housing Hall of Fame and the National Housing Hall of Fame. He is co-chairman of the House Program Review and Investigations Committee and vice chairman of the House Banking and Insurance Committee.

Kimberly Williams, M.D., is a physician with St. Claire Regional Medical Center in Morehead. Williams is board certified in pediatrics and emergency medicine and has been with St. Claire since 1988. For the past eight years, she has also served as the vice president for medical affairs and physician services. Williams is a community-based faculty member for the University of Kentucky College of Medicine and serves as the medical director for the Northeast Area Health Education Center. Williams is the past chair of the Kentucky TeleHealth Board and a member of the Morehead/Rowan County Chamber of Commerce Executive Board and the Morehead State University Foundation Board. She is a charter member of the Morehead Rotary Club. A native of Paintsville, Williams and her husband, Dion, have two children and three grandchildren.