RURAL HEALTH CARE: Its Effect On Rural Communities

Proceedings from the Sept. 15, 2015
Missouri Rural Health Care Summit
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ABOUT THIS REPORT

The U.S. health care environment is undergoing profound change as it evolves into an industry that emphasizes better access, lower costs and higher quality. Making the health care environment more dynamic, seniors comprise the largest and fastest growing segment in the U.S. population, in a trend known as the “Silver Tsunami.” As the demand for health care continues to grow with the aging population, rural communities face complex challenges to successfully manage the transition to a high-performing health care delivery system in this new environment. To examine issues surrounding the stability of the health care environment in rural Missouri, how it affects other rural stakeholders, and opportunities for rural communities, a Rural Health Summit was convened in Columbia, Mo., on Sept. 15.

Summit sponsors included AARP, the Missouri Academy of Family Physicians, the Missouri Alliance for Home Care, the Missouri Association for Osteopathic Physicians and Surgeons, the Missouri Coalition for Community Behavioral Healthcare, the Missouri Farm Bureau, the Missouri Hospital Association, the Missouri Nurses Association, the Missouri Primary Care Association, the Missouri Rural Health Clinics Association and the Missouri State Medical Association. Summit presenters included rural health leaders and subject matter experts who discussed critical health issues, highlighted current successes, identified continuing concerns and shared strategies and ideas for improving the health of Missourians in rural communities. Summit participants included health care executives, rural health advocates, rural service providers, agricultural business leaders, rural business and chamber leaders, and lawmakers. Herb Kuhn, MHA President and CEO, challenged all Summit participants to consider the following question.

“What is the value of retaining health care services in rural Missouri communities?”

This report incorporates many of the ideas and insights raised during the Summit that help inform answers to this question, and it includes information, resources and quotes from the Summit that can help Missouri stakeholders understand the value of rural health care. Supplemental information and details are provided in a series of appendices.
EXECUTIVE SUMMARY

“What is the value of retaining health care services in rural Missouri communities?”
— Herb Kuhn, CEO Missouri Hospital Association

PART ONE  Health Care Environment in Transition: Opportunities for Rural Health Systems

As the industry moves away from hospital-based care toward population-based care, existing and evolving health care trends are creating new value for health care in rural communities. This section provides a look at the changing health care marketplace and considers the emerging value of and opportunity for rural health in this new landscape. The section concludes with speakers’ recommendations for an implementation framework and strategies rural health providers and communities can consider as they transition to the new health care environment.

Rural Health Summit Keynote Speaker
• Eric Shell, CPA, MBA, Stroudwater

PART TWO  Current Successes and Continuing Concerns in Health Care in Rural Missouri

Although rural health care is commonly viewed from the perspective of the challenges it faces, the health care market is driving significant change in the rural health care system. What might appear to be difficulties may instead emerge as opportunities to improve the rural delivery system. A number of successful programs highlight innovative approaches Missouri’s rural communities are taking towards population health.

Missouri Rural Health Success Stories
• Show Me ECHO – Karen Edison, M.D., MU Center for Health Policy
• FraudWatch – R. Diane Hall, Associate State Director Community Outreach AARP
• MU Rural Track Pipeline Program – Kathleen Quinn, Ph.D., MU School of Medicine
• Long-Term Care Innovations – Marilyn Rantz, Ph.D., R.N., FAAN, MU Sinclair School of Nursing

Despite the success stories, rural communities in Missouri continue to face ongoing challenges that will need to be addressed to ensure a comprehensive rural health care delivery system. This section discusses three programs that have proven successful at addressing some important rural health issues. It also considers other areas that will require continued focus and ongoing attention to be properly addressed.

Missouri Rural Health Continuing Issues
• Rural Mental Health – Dave Duncan, Compass Health/Pathways Community Health
• Rural Medicine – Jim Steverner, M.D., MSPH, MU Professor of Clinical Family and Community Medicine
• Rural Life – Ann Schlue, Farm Bureau & Community Hospital – Fairfax
PART THREE Workforce Issues Legislation

An adequate supply of a highly-qualified workforce continues to remain one of the biggest challenges to rural health care, and many innovations and programs are making important strides to tackle the challenge. Public policies also are helping build the rural workforce and stabilize health care delivery in rural communities. To conclude the Summit, three Missouri state legislators participated in a panel to discuss legislation that they have introduced or supported regarding rural health care workforce shortages.

- MU School of Medicine Springfield Clinical Campus – Sen. Bob Dixon
- Missouri Health Care Professional Database – Rep. Diane Kirkton
- Advanced Practice Nursing Scope of Practice – Rep. Kathy Swan

In conclusion, the health care industry is undergoing a significant transformation that is creating unprecedented opportunities for rural communities to develop health care systems that meet their local needs. Rural health care stakeholders who want to retain and maximize value in this new landscape must understand — and plan for — how to make the transition to a sustainable, high-performing rural health delivery system that is designed to improve the community’s health.
This section provides an overview of the current national and state level health care market trends that may influence the value of rural health care in Missouri communities. It begins by looking at overall market trends related to health care access, cost and quality. As the industry moves away from hospital-based care toward population-based care, rural health care will have emerging value in this new landscape. If rural health care providers want to retain and maximize this value, it is important to understand — and make a plan for — how to make the transition to a high-performing delivery system.

MARKET OVERVIEW: HEALTH CARE’S CHANGING LANDSCAPE

The health care industry has experienced considerable change throughout the last several years. Ongoing trends, such as an increasing number of rural-urban health care mergers, acquisitions and affiliations, physicians transitioning between independent practices and hospital employment models, flattening patient volumes, CEO turnover, and more, are having a significant impact on rural health systems and the way they deliver care. The Affordable Care Act (ACA) has propelled even more changes in the market with many substantive reforms being implemented during the next two years. State Medicaid programs are moving toward managed care models or reduced fee-for-service (FFS) payments to balance state budgets. Commercial insurers are steering patients to lower cost, higher out-of-pocket options. Health providers face new levels of uncertainty in this dynamic environment and will be required to adapt to the changing market. Understanding these and other trends that are changing the landscape of health care can lead to more optimal allocation of scarce resources in rural communities to improve personal and population health. As discussed below, the significant drivers of the changing health care delivery landscape can be viewed through the lens of access, cost and quality.

Rural Health Care Access

Residents of rural communities historically have health care provider shortages and limited health insurance coverage; access to quality health services has been cited as the highest priority among rural health care stakeholders. Recent trends reflect an increase in access to insurance coverage, which may have important implications as rural providers work to maintain financial stability in communities with traditionally smaller populations and markets.

Access to Coverage

The ACA has helped eliminate some of the economic barriers to insurance access in rural areas by creating more options for private and public coverage. The implementation of the Health Insurance Marketplace extended opportunities for individuals and families to receive private insurance coverage. Additionally, in states expanding Medicaid eligibility, even more people are gaining coverage. Although individuals living in rural areas are more likely to be uninsured than those in urban areas (24 percent versus 18 percent), rural residents are 50 percent more likely to have Medicaid coverage. Despite opting to keep
Medicaid eligibility for adults at pre-ACA levels, Missouri has still seen a decline in uninsured, dropping from 15.4 percent in 2013 to 11.5 percent in the first half of 2015.3

The type of insurance people access also is changing the way individuals participate in their own health care. When health care spending is out-of-pocket or out of a health savings account (HSA), patients become cost-conscious consumers who may hesitate to visit the doctor or get a full range of tests, thus driving down use of health services. Throughout the last several years, there has been an increase in the prevalence of high deductible health plans (HDHPs). Of note, 58 percent of small businesses had HDHPs in 2013, which is of particular importance in rural communities that typically experience smaller employers, lower wages and self-employment.4

Despite the growth in access to coverage options for millions of individuals and families across the country, many still have trouble accessing health care because of underinsurance. Underinsured adults are those who had 12 months of continuous health coverage but still experienced one of the following.

- out-of-pocket costs, excluding premiums, during the prior 12 months equal to 10 percent or more of household income
- out-of-pocket costs, excluding premiums, equal to 5 percent or more of household income if income is less than 200 percent of the federal poverty level
- deductible is 5 percent or more of household income5

An estimated 31 million people, or 23 percent of adults ages 19 to 64 who were insured all year, were underinsured — more than double the rate of underinsurance in 2003. These underinsured adults are more likely to skip needed health care because of cost; more than 44 percent of underinsured adults reported not getting needed care because of cost in the last year, including not going to the doctor when sick, not filling a prescription, skipping a test or treatment recommended by a doctor, or not seeing a specialist.5

Access to Care

Compared to urban communities, rural communities tend to have access to fewer health care organizations and professionals of all types, less choice and competition among them, and broad variation in their availability at the local level. Critical access hospitals (CAHs), federally qualified health centers (FQHCs), and rural health clinics (RHCs) play an important role in the rural health care delivery system by serving as safety-net providers of primary care and other health care services.

- CAHs: Hospital certified to receive cost-based reimbursement. Certification requirements include fewer than 25 inpatient beds; fewer than 96-hour average length of stay for acute inpatient care; 24-hour emergency care; rural location at least 35 miles away from any other hospital or CAH.
- FQHCs: Providers offer primary care and preventive services, dental services, mental health and substance abuse services, transportation and hospital/specialist care for all age groups, regardless of ability to pay.
- RHCs: Clinics that must be located in rural, medically underserved areas. Must employ at least one nonphysician provider to provide services and have an arrangement with one or more hospitals to provide medically necessary services not available at the clinic.

Appendix B-1 provides a more detailed description of these provider types.

In rural communities, health care access is further limited by provider workforce shortages for certain core health care services, including emergency medical services, mental and behavioral health services, and oral health care. As a result, rural communities often rely on nonphysician health professionals, such as nurse practitioners and physician assistants, to provide primary care. Yet, rural communities still struggle with recruiting and retaining both physician and nonphysician health professionals because of concerns about isolation, limited health facilities and lack of employment and educational opportunities for provider families. Missouri is taking several innovative approaches to address these challenges, through both pilot programs and legislative policy changes, as discussed in Parts Two and Three of this report.
In addition to limited access to providers in rural communities, the location where consumers are choosing to access health care is changing as well. Industry trends show that there has been a shift from inpatient to outpatient health care use. Additionally, the rate of hospital readmissions has declined from 19.5 percent to 17.5 percent from 2007 to 2013. Reduced readmissions combined with a shift to outpatient care, has resulted in overall decline in hospital patient volume.

Each of these challenges related to rural access to health care coverage and care, including declining occupancy and revenues, difficulty in recruiting skilled workers and competition from urban hospitals, have contributed to rural hospital closures across the country, including two in Missouri.

### Rural Health Care Costs

In addition to the pressures facing rural health as a result of access challenges, declining patient volume and health care service utilization, rural health care also is facing ongoing challenges related to health care finance and economic trends.

### State Budget Deficits

Ongoing state budget pressures and growth in health care spending are driving states to reform their Medicaid programs and develop solutions that promote health, enhance quality and lower costs. In the last 20 years, Medicaid budgets have doubled, having a major impact on the ways states view their Medicaid programs. Medicaid initiatives continue to evolve and emerge across the country, with states taking several different and innovative approaches to minimize costs and reduce risk in their programs. See Appendix B-1 for examples of Medicaid innovations in other states.

#### Sustainable Growth Rate Fix

The recent changes to the sustainable growth rate (SGR) also will impact health care delivery in rural communities. From 2016 through 2019, providers will receive a 0.5 percent payment increase annually. Starting in 2020, there is no specific payment increase designated for five years. However, providers may participate in alternative payment models (APMs), such as accountable care organizations, bundled payments or other population-based health payment models. Providers that choose not to participate in APMs will be required to participate in the Merit Incentive Payment System (MIPS). The MIPS initiative will reimburse doctors based on their performance in four different categories, and physicians can see a payment increase or decrease from between -4 percent to +9 percent based on how they score on MIPS.

The SGR fix creates a strong incentive for physicians to move away from the current fee-for-service model and to new payment models that pay for value instead of volume. Further, throughout the next several years when the pay increase is limited to 0.5 percent, physicians will still be required to make various improvements, such as electronic health records, ICD-10 implementation and other changes that will lead to additional operational costs. Accordingly, rural providers will need to rethink resource allocation decisions at the hospital level and develop more sophisticated ways to partner with medical staff and make investments to help manage their medical practices and support affiliated independent practices.

#### Health Reform and Medicare and Medicaid Payment Policies

Through reimbursement policies, payers have significant influence over what providers practice in rural areas and how those services are delivered. Rural providers are disproportionately affected by the reimbursement policies of public payers like Medicare and Medicaid because of the poorer and older patient population. Both Medicare and Medicaid payment rates tend to be lower in rural areas. As alternatives to traditional FFS and cost-based reimbursement methods, the ACA created a number of new Medicare and Medicaid payment strategies that aim to move the needle toward rewarding quality. These new payment strategies include financial bonuses and penalties based on clinical quality, per capita payments for care management, and shared savings for improved efficiencies. The changes in Medicare and Medicaid payment policies implemented under the ACA throughout the next several years will increase pressure on rural hospital margins.
Rural Health Care Quality

In the midst of the transition from FFS payments to value-driven and population-based payments, health care payers are increasingly holding providers accountable — that is, at financial risk — for improved quality outcomes supported by care coordination, robust primary care and sophisticated performance metrics. Health care value is defined and measured as improved clinical quality, patient safety, and patient experience — or better health care — and lower per-capita costs. Accountable care can be thought of as a mechanism for providers to monetize the value derived from increasing quality and reducing costs. There also is increasing interest in models of care likely to improve health care value and outcomes, including primary care medical homes, new models of bundling payments for episodes of care and accountable care organizations (ACOs). In these alternative payment models, health care providers are accountable for the quality and cost of the care they deliver to patients (see Appendix B-1 for more detailed information about alternative payment models).

Accountable Care Organizations

An ACO is a health care provider group that contracts with a payer to provide high clinical quality and positive patient experience at a reduced cost. The Medicare Shared Savings Program (MSSP) was established as part of the ACA. The MSSP and associated ACO demonstrations represent a new health care delivery and payment model intended to support clinical quality, patient satisfaction and controlled costs. If health care providers organized as an ACO deliver high-quality care, positive patient experience and lower costs than predicted, Medicare shares the cost savings (above a threshold value) with the ACO.

SUMMARY | Selected Factors Impacting Rural Hospitals Throughout Next 5-10 Years

- Payment systems transitioning from volume-based to value-based
- Increased emphasis of quality as payment and market differentiator
  - Reduced payments that are “real this time”
    - third party steerage (surgery, lab and imaging), RAC audits
  — Tennessee and Louisiana Hospital CEOs and CFOs interviewed by Eric Shell

The three topics highlighted above can be summarized as population health, quality and efficiency. What this shows is that the market has created a competitive environment centered on patient value, as defined by Don Berwick’s Triple Aim of health care. This follows the prediction by Michael Porter that when market competition in health care focuses on the biggest economic driver of health care — value — costs will come out and innovation will come in.

NEW DIRECTION AND THE VALUE OF RURAL HEALTH CARE

Some rural health care providers may have trouble meeting the increasing demands for rural health care value and performing in the new models mentioned above. The infrastructure necessary for innovation to improve quality and value includes quality improvement expertise, EHR and health information technology platforms, patient centered focus and experience, clinical care standardization, capacity for care coordination, and access to financial resources. Small size, low patient volumes and limited resources and financial capacity, make it difficult for rural health care providers to participate in accountable health care delivery models and often requires the resources of larger, organized health systems.
To obtain access to these resources, health care providers are increasingly aligning and creating opportunities for developing a clinically integrated network to better manage the care of people along the continuum. To the extent that rural communities are based around the primary care delivery system, rural health care will have incredible value in this new environment. As such, primary care providers are the revenue centers of the future, as specialized care, technology and brick and mortar buildings become cost centers.

Smaller community and rural hospitals will have value by aligning revenue centers, rather than cost-drivers, and can position themselves for new markets by increasing efficiency and demonstrating high quality through monitoring and pursuing quality goals.

Functional imperatives in the FFS environment meant that in order to be successful, providers needed to manage cost, utilization and price, resulting in a system where independent organizations competed with each other — even in some rural communities with smaller health care markets. By changing payment structures to population-based focus, the functional imperatives require stakeholders to come together around the shared goal of improving the community’s health.

While limitations exist related to scale in rural health system development, smaller systems also have important advantages. Smaller systems can have the flexibility necessary to manage the transition to the new health care environment, and innovative delivery arrangements may be pursued more easily among stakeholders who are familiar with each other and who have a collective vested interest in improving community health and well-being. The transition to high-performance rural health systems will necessitate re-evaluating the mix of essential services to have a greater focus on primary care, integration within and across service sectors, attention to population health, and interdependent governance and management structures. Close-knit rural communities may have greater odds of success in implementing new strategies than in urban communities.

**IMPLEMENTATION FRAMEWORK FOR RURAL HOSPITAL STRATEGIES**

Once rural health care providers fully understand the challenges facing health in rural communities and appreciate the value of rural health care in the changing landscape, how do they begin to transition?

Moving from a volume-based health care system to a value-based health care system is a complex and challenging undertaking, especially for rural communities; yet, they have the potential for developing a high performance rural health system. The Implementation Framework included in Appendix B-1 provides a path to navigate from the current FFS world to population-based payment.

### Important Strategies For Providers To Consider

- Increase leadership awareness of new environmental realities
- Improve operational efficiency of provider organizations
- Adapt effective quality measurement and improvement systems as a strategic priority
- Align/partner with medical staff members contractually, functionally and through governance where appropriate
- Seek interdependent relationships with developing regional systems

— Eric Shell, Rural Health Summit Keynote Speaker

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Although rural health care is commonly viewed from the perspective of the challenges it faces, the health care market is driving significant change in the rural health care system, as discussed in Part One of this report. What might initially appear to be rural health challenges may emerge as opportunities to improve the rural delivery system. This section describes a number of successful programs discussed at the Summit that highlight innovative approaches Missouri’s rural communities are taking towards population health. Despite the success stories, rural communities in Missouri continue to face ongoing challenges that will need to be addressed to ensure a comprehensive rural health care delivery system. The second part of this section describes four of these continuing issues discussed at the Summit. Additional information can be found in Appendix B-2.

MISSOURI RURAL HEALTH SUCCESS STORIES

Show Me ECHO

“Show Me ECHO is going to change rural health care in Missouri.” — Karen Edison, M.D.

Project ECHO (Extension for Community Healthcare Outcomes) was created by Dr. Sanjeev Arora at the University of New Mexico. Project ECHO uses videoconferencing technology to bring together a multidisciplinary team of specialists and primary care providers to collaborate in a case-based learning environment to develop advanced clinical skills and best practices in rural settings. Each ECHO clinic includes of case presentations by the primary care providers and responses from the specialist team and other primary care providers, and an educational presentation discussing the latest evidence-based case studies. Participating primary care providers receive no-cost continuing medical education credits for their ECHO clinic time.

The Show Me ECHO Project began with a core team of providers and current and former legislators who became interested in improving telehealth services. The core team included Karen Edison, M.D., Wayne Cooper, M.D., Rep. Diane Franklin and Rachel Mutrex with the Missouri Telehealth Network who traveled to New Mexico to learn more about Project ECHO technology. Realizing Project ECHO’s potential use for addressing a variety of conditions, particularly those that are complex, costly, common and chronic, the team invited Dr. Aurora to educate the Missouri legislature and governor on the program, ultimately receiving full support. Although the legislation was passed in the 2014 legislative session, the funding was vetoed. Show Me ECHO secured funding from alternative sources to conduct pilot projects, including the community health centers in Joplin, for the year.

In 2015, Show Me ECHO received funding to set up the following four new ECHO programs, which are slated to start by the end of the year: endocrinology, asthma, hepatitis and dermatology. Next year, Show Me ECHO will incorporate obstetrics and a mental/behavioral health program. To participate in Show Me ECHO, providers simply need a computer with a forward-facing camera.

The program has been well-received by patients and providers who currently participate. The program’s success supports the idea that health care is better distributed regionally, if not locally, and patient centered care entails taking services to patients. The program has raised the satisfaction level for rural health providers who might feel isolated. Show Me ECHO gives these providers an opportunity to interact with people and participate in a two-way, multisite learning collaborative with a rich learning dynamic.
FraudWatch
Fraud remains a significant issue facing all Americans, including Missouri residents. In Missouri and across the country, seniors are often victims of fraudulent scams. In 2014, more than 12.7 million people were victims of identity theft. That amounts to a person’s identity stolen almost every two seconds. Seniors make attractive targets for criminals seeking to commit fraud. As part of the “silver tsunami,” seniors make up the largest and fastest growing segment of the population, tend to have greater financial resources and are more likely to face cognitive decline. In rural areas, where seniors not only make up a large proportion of the population, but also tend to have lower education and socioeconomic status, seniors are even more susceptible to being targeted. The AARP FraudWatch Network was created to assist in the fight against fraud by serving as a watchdog and providing free educational resources.

The top three types of fraudulent scams in Missouri include ID theft, debt collection scams and imposter scams. The recent cyber-attack on health insurer Anthem is perhaps the latest and most prominent example of a health-related data breach. Criminals stole personal identifying data, including social security numbers, personal income and patient’s employer information. As health information technology becomes more prevalent in health care delivery systems, it will be more important than ever for consumers to diligently monitor their personal information to prevent becoming victims of fraud.

MU Area Health Education Center – Rural Track Pipeline Program
The University of Missouri’s School of Medicine is the state’s leading educator of physicians practicing in the state; as such, it is uniquely positioned to address the supply and distribution of physicians in rural Missouri. In 1994, Dean Lester R. Bryant requested the creation of the MU Area Health Education Center (MU AHEC) program office to reduce physician shortages in rural areas of Missouri. The MU AHEC Rural Track Pipeline Program (RTPP) was designed to provide students with ongoing exposure to rural medicine and comprise four distinct but related curriculum and clinical components: the Bryant Scholars Pre-Admission Program, the Summer Community Program, the Rural Track Clerkship Program and the Rural Track Elective Program.

The RTPP has been extremely successful and shown several positive outcomes. The Bryant Scholar Program has resulted in nearly 60 percent of students practicing medicine in rural Missouri, among other positive outcomes. Many of the students participating in the in the Summer Community Program found the program to be extremely rewarding. Additional positive outcomes of the RTPP show that program participants are more likely to choose a primary care specialty and twice as likely to choose family medicine as their specialty when compared to non-participants. During the 2008 Liaison Committee on Medical Education accreditation review, the Rural Track Clerkship Program was listed as one of the five institutional strengths of the University of Missouri’s School of Medicine.

The RTPP is one of about 33 programs nationwide and plans to continue to build on its success by educating other schools about its programs and helping them understand that living and working in rural communities, in addition to being from rural communities, helps make better health care providers.

Long-Term Care Innovations
Many senior citizens and their families prefer to remain at home and want to postpone or even avoid nursing home care. The Aging in Place (AIP) initiative was developed in 1996 in the Sinclair School of Nursing with an interdisciplinary team to provide more and higher-quality services at home. Participants who “age in place” are able to receive services when they need them and regain independence; later services are limited or withdrawn so costs are controlled. As part of this initiative, TigerPlace, a state-of-the-art independent living facility, was built to nursing home standards, is licensed as intermediate care and can be operated as independent housing with services.
Since fall 2005, TigerPlace apartments have had sensor networks installed that include motion sensors, chair pads, stove sensors and bed sensors that capture restlessness and low, normal and high pulse and respiration rates. Researchers developed an integrated intelligent monitoring system that reliably captures data about residents and their environment in a noninvasive manner and balances the needs of health, safety and privacy, all without the individual having to wear monitors. Using data from this sensor network as a guide, providers are able to develop personalized interventions to improve quality of life leading to better health.

The goal of the initiative is to improve quality of life and provide better health care for rural seniors. The TigerPlace initiative is slated to expand. Currently, the initiative is in place in 12 different assisted living facilities in rural areas as part of a National Institute of Health-funded randomized clinical trial. The initiative continues to pilot test to seniors in Columbia, Mo., and leaders are working with rural electrical cooperatives to install fiber in many rural areas to increase capacity as the pilot expands out of Columbia. The program plans to reach out to rural areas so that innovations tested at TigerPlace can be commercialized and made available in other rural areas.

**MISSOURI RURAL HEALTH CONTINUING ISSUES**

**Rural Mental Health**

In response to the State Department of Mental Health closing most of Missouri’s inpatient psychiatric facilities two years ago, Missouri’s governor collaborated with the Missouri Sheriffs’ Association to establish Missouri’s Community Mental Health Liaison program as a way to address mental health care needs in the state. Community mental health liaisons coordinate with law enforcement and the courts to educate individuals involved in the justice system about mental health care. This is crucial, as law enforcement and emergency rooms have become the primary care centers for mental health in the state and are under an increasing amount of pressure. Community mental health liaisons have been valuable in helping law enforcement understand that there may be better interventions for people dealing with mental health issues than traditional responses of putting people in jail, rehab or being involuntarily committed. As a result, liaisons are able to keep people out of jails and hospitals, lowering the amount of uncompensated care hospitals have to provide.

**Rural Medicine**

The aging rural patient and provider populations point to the need for more primary care providers in Missouri. Family physicians are leading the charge to address this challenge, with the help of nurse practitioners and physician assistants, to provide care to all people. Nurses and family doctors are working together to develop collaborative models of care. Yet, despite the recognized importance of primary care providers (PCPs) in light of the increasing demand for health care and decreasing supply of health care providers, a growing number of trained primary care providers are leaving the state. Although Missouri’s high schools, colleges and medical schools produce a great number of trained PCPs, Missouri has trouble keeping them in the state. In 2014, Missouri had more than 186 medical school graduates, yet this number exceeded the residency slots in the state. As a result, Missouri ends up exporting primary care providers to other states. For example, Missouri loses a large number of its residents to Kansas, which provides medical students with more generous loan repayment options. As such, Kansas is fulfilling its rural health needs by attracting Missouri-trained physicians.10
Rural health care consumers are generally not concerned with new models of care, payment mechanisms and other policy-related topics. Instead, they are looking for low-cost health care that has high value and is easily accessible. CAHs will play an important role in containing costs and improving value in rural health. Furthermore, because CAHs have come under increased levels of scrutiny recently, they have to prepare to take responsibility for cutting costs. Additionally, as high-deductible health plans become more prevalent in rural communities, consumers will be more concerned about the quality of care at CAHs. Accordingly, the current cost-based reimbursement structure at CAHs is likely unsustainable. However, because rural hospitals are inherently linked to the communities they serve, they are well-positioned to thrive in this changing environment. As a hub for local health care services and a community leader, CAHs have the opportunity to develop affiliations, partnerships and programs that keep local populations healthy and ultimately reduce overall health care spending.

As part of a public-private partnership with the University of Missouri, CoxHealth and Mercy Springfield, the project established a new Patient Centered Care Learning Center in Columbia, Mo., and a new clinical campus in Springfield, Mo. The Patient Centered Care Learning Center will provide patient-based learning opportunities to students and the creation of the Springfield Clinical Campus will allow the University of Missouri to eventually increase its class size from 96 students to 128 students a year. All students will spend the first two years studying in Columbia, and once the Springfield campus is fully operational as anticipated in 2016, eight to 12 students will complete their third and fourth years of clinical training at the clinical campus in Springfield. Medical students typically to practice where they grew up or where they attended school, so the project aims to increase the odds of putting more physicians in Springfield, southwest Missouri and other rural areas with workforce shortages by giving students more opportunities for clinical training in the hospitals and physician practices in the area, while also educating them on the diverse health needs of rural areas in Missouri.

This project represents a cooperative effort to create a sensible solution to address the workforce shortage and has the potential to train more doctors, create more jobs and boost Missouri’s economy. As a result of the collaboration between
universities, hospitals, lawmakers and other stakeholders, the project will ultimately result in an additional 300 doctors in Missouri, create more than 3,500 jobs and add more than $390 million dollars to the state’s economy each year. With the trends in physician shortages, it is imperative to train health care professionals in rural communities where there is the most need and provide rural Missourians with more choices and better access to health care.\textsuperscript{11}

**Missouri Health Care Professional Database**

“We know the decline is coming, but the question is when and where the impacts will be felt most?” – Rep. Diane Franklin

In the 2015 legislative session, Missouri State Rep. Diane Franklin sponsored House Bill 112, which proposed to allow various state boards to collaborate with the Missouri Department of Health & Senior Services (DHSS) and other entities to collect and analyze workforce data with the goal of assessing the availability of qualified health care professionals. The legislation aims to bolster the existing Missouri Healthcare Workforce Registry and Exchange (MoHWoRx) by supplementing the current data with professional license, registration and permit data to assess the availability of qualified health care personnel and the accessibility of primary care and specialty care in the state.

MoHWoRx is an information system developed by DHSS to help health professionals meet state registration requirements and to provide comprehensive and timely information on health care access statewide. MoHWoRx currently supports the Missouri Health Professionals Registry (MHPR) and the Bureau of Narcotics and Dangerous Drugs (BNDD) online registration. State law requires BNDD to maintain a registry of the individuals and organizations that prescribe, dispense or conduct any activities with controlled substances. MHPR is a voluntary registration tool that will provide the foundation for a comprehensive Missouri health care workforce database. Information collected through the registry will ensure accurate and timely information on health care access for local and state planning and will support designations of Health Professional Shortage Areas (HPSA). Yet, despite MoHWoRx’s potential, the current system is both out-of-date and inaccurate, limiting the information available to policymakers and health community leaders working to expand the state’s medical workforce. Further, the current system’s shortcomings prevent early detection of limited health care accessibility and access in terms of geography, demography and specialty care. As such, Missouri’s approach to collecting health workforce data for licensing functions is removed from information detailing practice locations and characteristics.

The Health Care Professional Database proposed in HB 112 aims to enhance the system so that policymakers and other stakeholders can gather and process data to better identify where and what providers practice. An official, all-encompassing, updated aggregated health care workforce database would paint a comprehensive picture of the Missouri medical landscape and provide information to stakeholders on how to best approach solutions in underserved areas. With the status quo, Missouri falls behind several states in its ability to assess the types, number and practice locations of its own health care professionals. Rep. Franklin plans to reintroduce a bill that promotes a health care workforce analysis application again during the 2016 legislative session.

**Advanced Practice Nursing Scope of Practice**

An APRN is a registered nurse who has completed graduate-level education building on the existing skills and competencies of R.N.s, is certified by a nationally recognized certifying body, is licensed as an R.N. in Missouri and is recognized by the state as an APRN. There are four major APRN roles: nurse practitioner, nurse anesthetist, certified nurse midwife and clinical nurse specialist. The regulation of the APRN is set by state rather than federal law, thus the scope of practice for an APRN varies widely by state and specialty. The American Association of Nurse Practitioners has three defined categories of scope of practice laws.
• **Full Practice** – state practice and licensure law provides for all nurse practitioners to evaluate patients, diagnose, order and interpret diagnostic tests, initiate and manage treatments — including prescribing medications — under the exclusive licensure authority of the state board of nursing. This is the model recommended by the Institute of Medicine.

• **Reduced Practice** – state practice and licensure law reduces the ability of nurse practitioners to engage in at least one element of NP practice. States require a regulated collaborative agreement with an outside health discipline for the NP to provide patient care.

• **Restricted Practice** – state practice and licensure law restricts the ability of a nurse practitioner to engage in at least one element of NP practice. State requires supervision, delegation or team-management by an outside health discipline for the NP to provide patient care.

Studies show that nurse practitioners migrate to states with fewer barriers and leave states with more barriers. Twenty-one states and the District of Columbia allow a full scope-of-practice law. Iowa is the closest state to Missouri that is a full practice state. The remaining twenty-nine states require a documented relationship in writing with an outside health professional. Seventeen states have reduced scope of practice laws, including the following Missouri border states: Arkansas, Illinois, Kansas and Kentucky. The remaining twelve states, including Missouri, are restricted practice states that require supervision, observation, etc., by an outside health professional. NPs are in the primary care workforce, but given Missouri’s restrictive scope-of-practice laws, the state may be faced with reduced numbers of NPs. A summary of Missouri’s statutory provisions and administrative rules governing APRN scope of practice is included in Appendix B-3.

**Conclusion**

The health care industry is undergoing a significant transformation that is creating unprecedented opportunities for rural Missouri communities to develop health care systems that meet their local needs. Missouri’s rural health care stakeholders who want to retain and maximize value in this new landscape must understand — and plan for — how to make the transition to a sustainable, high-performing rural health delivery system that is designed to improve the community’s health.
References and Endnotes


3 Gallop August 10, 2015 Survey.


13 U.S. Census Bureau, State & County QuickFacts


15 Missouri Department of Health & Senior Services, Bureau of Health Care Analysis and Data Dissemination.

16 Missouri Department of Health & Senior Services, Bureau of Health Care Analysis and Data Dissemination. 2009 hospital utilization survey.
APPENDIX A  Background on Rural Health Care and Its Effect on Rural Communities in Missouri

Rural communities are a critical part of the U.S., representing nearly 20 percent of the nation’s population. While the basic demographic feature of a rural area is that it is a place of low population density and small aggregate size, there is not a single, standard definition of “rural” in terms of population statistics. The U.S. Census Bureau provides the longest standing U.S. definition, which defines “rural” as open country and settlements of fewer than 2,500 residents, excluding suburbs surrounding urbanized areas with a population of 50,000 or more. Other federal agencies use varying definitions emphasizing different criteria, such as commuting patterns, population size and population density. As a result, different definitions generate different numbers for a rural population.13

Understanding the effect of rural health care on rural Missouri communities requires an understanding of the characteristics of rural communities, the people living in them, and their health issues. While rural and urban communities in Missouri face health care challenges that are somewhat similar and reflective of nationwide problems, there are notable differences. Health challenges facing rural Missouri communities are compounded by rural communities’ demographic characteristics, health status and access to providers.

Of the more than six million Missouri residents, 2.23 million, or 37 percent, are considered rural residents.14 Currently, one million of the state’s residents are on Medicare. If Missouri follows the national trend of the “silver tsunami,” the state can have as many as 1.5 million people on Medicare by 2030. Rural Missourians are at a significant disadvantage compared to their urban counterparts when considering income and education. Rural Missourians generally have lower income levels, education, healthy behaviors and health care access, which leads to reductions in health status and life expectancy. Missouri’s rural poverty rate is 18 percent compared to an urban poverty rate of 14.5 percent.15

Missouri Rural/Urban County Map

![Missouri Rural/Urban County Map](image-url)
Rural Missourians also are generally less healthy than urban residents and more likely to die at an earlier age. The 2006-2010 average life expectancy for rural areas was 76.5 years compared to 77.5 years for urban areas. The rural death rate for all causes during 2011 was 853.4 deaths per 100,000 residents and 778.9 deaths per 100,000 in urban areas, nearly 10 percent less. Rural Missourians have increased levels of health risk factors, reporting significantly higher smoking rates, lower physical activity levels, increased obesity rates, higher rates of high blood pressure and high cholesterol, and lower rates of preventative screenings.\textsuperscript{15}

Health care resources in rural Missouri are limited, even for those with access to health insurance coverage, transportation and economic stability. Of the 166 licensed hospitals in Missouri, 76 (41 percent) are located in rural areas. Of those 76 hospitals, 35 are CAHs. The majority of rural counties are designated as health professional shortage areas (HPSAs); of the 101 rural counties in Missouri, 98 are primary medical care HPSAs, 98 are primary care mental HPSAs, and 92 are dental HPSAs.

\textbf{Number of Staff Hospital Beds Per 1,000 Residents – 2013\textsuperscript{16}}
APPENDIX B
Supplemental Information From Summit Presentations

Slides from the Summit presentations can be found on mhanet.org. Supplemental information is provided below.

APPENDIX B-1: HEALTH CARE ENVIRONMENT IN TRANSITION: OPPORTUNITIES FOR RURAL HEALTH SYSTEMS

<table>
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<th>SGR Fix Rate Changes Summary</th>
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<th>ACA Payment Changes for Medicare and Medicaid</th>
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New Economic Model for Health Care Value

Implementation Framework
APPENDIX B-2: CURRENT SUCCESSES AND CONTINUING CONCERNS IN HEALTH CARE IN RURAL MISSOURI
APPENDIX B-3: HEALTH CARE WORKFORCE LEGISLATION

Screenshot of Missouri Health Care Workforce Database
Health Care Workforce Database Examples in Other States

**North Carolina Health Professions Data System (HPDS)**
- Established in 1974 and maintained since 1979.
- Gathers and publishes descriptive North Carolina medical professional data.
- University of North Carolina maintains the system in conjunction with the North Carolina Area Health Education Centers Program and North Carolina’s independent health professional licensing boards.
- North Carolina HPDS collects name, home address, business address, birth year, sex, race, information on basic professional education (i.e. school name and state, year graduated, and degree), specialty, activity status, form of employment, practice setting, total hours worked in an average week and percent time in direct patient care.
- All the information is put into an aggregated set and distributed in aggregate form with numbers and maps along with a published book of county profiles. Qualitative and confidential data from licensees are not published and are only disclosed with the approval of the governing board of jurisdiction.

**Nebraska’s Health Professional Tracking Service**
- Nebraska implemented a similar program in 1995.
- Managed at the University of Nebraska Medical Center.
- Has been able to analyze continuously-updated data to publish reports on:
  - Revealing strengths and weaknesses in the cancer treatment workforce
  - Urgent care trends in the state
  - Dental coverage
  - Data comparisons, supply and characteristics of the active primary care physician workforce

APRN Statutory and Administrative Provisions in Missouri

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<th>Category</th>
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<td><strong>Geographic Requirements</strong></td>
<td>Physician must be located within 50 miles of the APRN in an HPSA or 30 miles in a non-HPSA.</td>
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<tr>
<td><strong>Location Restrictions</strong></td>
<td>APRNs are required to practice in the same location as the collaborating physician for one month prior to practicing at a separate location. If the collaborator changes, this process must be repeated. During this time, the APRN’s availability to see patients is restricted to the location of the new collaborative physician.</td>
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<tr>
<td><strong>APRN Participation Limits</strong></td>
<td>A physician is limited to collaborating with no more than three full-time equivalent APRNs.</td>
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<td><strong>Prescriptive Authority</strong></td>
<td>An APRN is not allowed to prescribe controlled medications, such as pain medications containing narcotics, unless the collaborating physician allows such prescriptive privileges within the collaborative practice agreement.</td>
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<td><strong>Physician Oversight</strong></td>
<td>If the APRN provides services to a patient for other than an acute self-limited or well-defined condition, the patient is to be examined and evaluated by a physician within two weeks. The collaborating physician (or other designated physician) must be immediately available for consultation. If the collaborating physician or designee is unavailable (vacation, on leave, etc.), patient services cannot be provided by the APRN. When the APRN practices at a separate site from the collaborator, the collaborating physician shall be present at that site at least once every two weeks to review the APRN’s services and to provide medical services.</td>
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<tr>
<td><strong>Chart Review Requirements</strong></td>
<td>A physician must review 10 percent of APRN charts. The chart review increases to a 20 percent chart review if controlled substances are prescribed.</td>
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