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Medicaid Reforms
c/o Dr. Barbara Langner
Medicaid Director
Kansas Health Policy Authority
900 SW Jackson, Suite 900
Topeka, KS 66612

Dear Barbara,

Thank you for giving us this opportunity to provide input on how to achieve long-term savings and improve the quality of services for the Kansas Medicaid program. Please find attached Cerner's official response to Lt. Governor Jeff Colyer's recent request on this challenging and pressing topic. The State of Kansas is not alone in its battle against skyrocketing healthcare costs and overextended budgets, and we applaud your efforts in soliciting input from such a broad range of stakeholders.

You will no doubt receive responses from many great thought leaders in the state and throughout the health industry. Cerner's unique perspective comes from decades of experience in automating and transforming healthcare; it enables us to be innovative and visionary, yet grounded in the realities of today's world. Improving the health of individuals and communities is our core business.

Using technology and the collective knowledge leveraged from more than 4,500 client engagements, we are revolutionizing the methods by which individuals interact with health providers. At Cerner, we believe the current healthcare model of sick care is fundamentally broken, and because healthcare is holistic, our approach to it must also be comprehensive. As Cerner CEO Neal Patterson says: "We are going to shift the [healthcare] paradigm from 'present and react' to 'predict and prevent.'"

Cerner's Vision for Kansas Medicaid Reform outlines two approaches: 1) a comprehensive approach toward long-term, sustainable change that significantly impacts the behaviors of the Kansas provider community and the Medicaid population it serves; and 2) short-term changes that can be implemented quickly and inexpensively while containing costs and improving healthcare quality, especially for those in rural communities.

The short-term approach focuses on connecting Kansas' rural provider communities through secure, direct, standards-based messaging. This would allow the exchange of key clinical data, while encouraging the implementation of e-visits for some types of consultations as a mechanism to engage consumers and combat obstacles to access. Cerner's comprehensive approach focuses on a framework to enable accountability that ultimately evolves the role of the traditional Medicaid patient to a true healthcare consumer, involved in and accountable for healthy choices.

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Our unique approach could be applied to many types of populations in addition to Medicaid, such as Kansas state employees and other privately-insured populations, and we welcome the opportunity to discuss our vision in greater detail. Further, Kansas has made significant strides in outlining its State HIT Plan, and our recommendations integrate seamlessly, maximizing the investments made statewide in HIT. Together, we can set the state on a sustainable course that benefits every Kansan and fundamentally changes the health experience of every Medicaid recipient.

Sincerely,

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Cerner's Vision for Kansas Medicaid Reform

Across the nation, Medicaid accounts for approximately one-sixth of the total healthcare spend. In fiscal year 2009, total federal and state spend on Medicaid was more than $339 billion. The elderly and disabled make up a majority of Medicaid recipients. In general, these individuals experience higher utilization of acute care services and are more likely to use long-term care services. Typically, Medicaid expenditures focus on a small concentration of high-cost patients. Federal and state budgets are in trouble, yet Medicaid enrollment continues to rise. States face major budget gaps and major decisions when federal stimulus funds that support Medicaid end in June. Kansas Medicaid projects a 53% increase in costs in 2012, and a resulting estimated $492 million state budget deficit.

Over the past several years, Kansas Medicaid has undergone several innovative initiatives to improve quality and lower costs. Cerner is pleased to provide its response to Lt. Governor Colyer's request for additional ideas to continue the reform of the Kansas Medicaid program.

Essentially, Cerner recommends the simultaneous implementation of two approaches. The first is a long-term, comprehensive approach that focuses on every aspect of the healthcare delivery system to make it more efficient with higher quality outcomes: consumer experience, well and sick care, performance and outcomes, payment and reimbursement. The second is a short-term approach intended to move quickly and inexpensively to build toward the comprehensive vision. It focuses on connecting rural providers to each other and their Medicaid patients through secure messaging and by promoting e-visits.

Approach 1: Cerner's Comprehensive Strategy to Systemically Improve the Health of the Kansas Medicaid Population

Several years ago, Cerner took steps to disrupt our healthcare system and how its own associates utilized it. To curb the growth of Cerner's healthcare spend, we aligned benefits with healthy behaviors, built on-site medical homes and engaged associates in their own health improvement. From 2007-2009, while still aging two years, 77% of Cerner associates experienced a neutral or positive change in their health status. Emergency room visits dropped, and for those who designate a Cerner primary medical home, Cerner achieved a $200 per member, per month, cost decrease.

Based on strategies Cerner has implemented in its own "laboratory of reform," and conversations with key healthcare industry stakeholders across the U.S., we developed an approach to improve the health of populations. This approach allows an entity responsible for health outcomes and costs of a population—such as Kansas managing its Medicaid and employee populations, and self-funded employers—to implement a framework for accountability by asking several key questions:

- Are individuals currently enrolled incented toward healthy behaviors and outcomes?
- Does the program have the tools for analyzing and risk stratifying its population?
- Are individuals "at risk" for costly or unhealthy outcomes established in a "virtual" medical home with a standardized health treatment plan?
- Are providers aligned on utilization of personalized health treatment plans toward mutual goals and connected payment?
- Can financial and clinical outcomes be measured across the population?

Ultimately, these healthier populations mean:
- **Improved outcomes:** appropriateness + timeliness + outcomes
- **Greater efficiency:** utilization + cost + resources
- **Increased patient satisfaction:** experience + feeling of health + value.

Cerner's vision for reform in the Kansas Medicaid program consists of performing data analysis against the entire population. We would then gradually target based on the results of the data, essentially repeating the process to expand and refine the strategy as the data determines.

Step One: Analyze data

Multiple sources are necessary to successfully aggregate and analyze data to identify opportunities to design, build and deploy programs that target proactive health and care. Crucial data is contained in databases that claims, clinicians and pharmacy benefit managers (PBMs) access daily. Potential sources of clinical information include statewide health information exchanges (HIE), such as the KHIN and, eventually, the KHIE; publically funded facilities including FQHCs; state-funded university hospitals; and partnerships with private hospitals. Clinical data best represents the patient's current health status and targets at-risk populations based on additional factors such as laboratory results, vital signs, and self-entered information such as daily blood sugar draws.

Step Two: Focus on a high value provider network

Based on the data, provider profiles begin to emerge. Highly valued providers operate with lower costs and provide better quality outcomes. Medical homes that support process improvements and chronic condition management should be at the center of discussions.

Goals and outcomes must align with incentives, yet each population will be different and targeted as such. For example, effective incentives for providers and/or hospitals may be shared savings approaches, bundled payments for episodes or services or capitation for services such as all preventive care. Prior studies have found that issuing a single payment shared by providers for episodes of care root out inefficiencies, improve quality and deliver major savings.

Providers need to have incentives and know that they have the tools and resources to increase their caseload without decreasing their profit or negatively impacting their practice. As Kansas experienced with its current patient-centered medical home (PCMH) pilot, providers in Wichita still maintain a high percentage of panel holds. (Shawnee County has 76% of their PCCMs on panel hold, with 94% of those being family practitioners or internal medicine specialties that primarily see adults.) Working with providers who have these goals can help overcome issues that may impact access to care. Further, new Commerce Transactions, such as real-time claims submission and real-time payments, offer incentives and reduce high costs associated with claims administration and reimbursement.

Step Three: Engage consumers

Data analysis is leveraged to target populations based on:
- Geography (potentially cross-referenced against other statewide initiatives, such as broadband activities; large concentrations of high-volume or high-cost providers)
- Condition (diabetes, heart disease)
- Service type (home health care, end of life care)
- Age of population
- Health program (mental health, children, pregnant women)

Initial targets may be high-risk/high-cost populations, such as the aging and disabled. Each population has its own challenges and obstacles so incentives must be tailored to fit consumer and provider needs.

When an individual enrolls, he or she should complete a health risk assessment, including a biometric screening, to establish their baseline health status. Consumers will have access to all of their health information through their personal health record (PHR), which is crucial to their provider's "virtual" medical home. Further, e-visits will be encouraged for targeted types of communications. (See discussion in *Provider-to-Consumer Secure Electronic Communication; E-mail and E-visits.*)

Consumers need incentive to become active participants in their health –this is a major behavioral change. We propose use of incentives for the provider and the consumer as they transition to an innovative care delivery model. Use results of the data analysis to define incentives to enable proactive health, including leveraging financial and quality transparency of providers and services. Employ additional consumer initiatives to challenge and motivate the consumer. The state can pursue partnerships with other resources to provide technology, such as laptops and cell phones, to encourage consumer interaction with providers, and align resources such as public health agencies. Establishing healthy behaviors in the Medicaid population is crucial, as patients tend to move in and out of the program.

Negative actions, such as charging for services, will impact the health and cost of the population as patients may actually avoid preventive visits until a costly health emergency arises. Several creative and innovative pilots have been leveraged to engage the consumer. In one, consumers received a cell phone that allowed unlimited texting for appointment and medication reminders, compliance or to check in. Consumers could text their responses to care coordinators without the cost and intrusiveness of daily home visits. Technology devices may also enable access to social sites where patients can share information with others in similar health situations.

As results of the ongoing data analysis are available, additional populations can be targeted and rolled out as modifications are made to current approaches.

Step Four: Risk stratify the population

Leveraging the available data, risk modeling helps define crucial target areas such as avoidable complications, and reducing ER visits and hospital admissions. The effects will enable the alignment of resources to patient needs, as well as provide the foundation for the Personalized Health Plan.

Step Five: Implement personalized health plans in the virtual medical home

Providers will leverage and be measured on their successful use of knowledge-based treatment plans to facilitate health and care. Personalized health plans integrate a risk stratification process centered on the consumer's baseline health risk assessment and their ongoing activities.

Step Six: Ongoing data analytics

Utilization and quality are continuously monitored through ongoing data analytics. Standard measures are implemented and expanded as results and advances of health dictate.

Additional Considerations

Cerner envisions successful integration across multiple HIT initiatives. The state health insurance exchange is expected to work closely with the new Medicaid eligibility and enrollment system. We recommend a complete analysis of this integration to ensure the best possible strategy at each critical point. For example, when a consumer interacts with the health insurance exchange the exchange could recommend providers accepting enrollment in medical homes or offer personal health records.

We've all heard the expression "it takes a village." To transform healthcare, "it takes a health village" that focuses on connectivity, accountability and involvement, by traditional and non-traditional stakeholders, in an individual's health and wellbeing. Cerner recommends the state leverage and partner with state-funded and privately-funded community resources, such as pharmacies, public health entities, schools and churches.

Approach 2: Move Quickly and Inexpensively–Connect the Rural Community; Support E-visits

Rural communities are integral to Kansas' culture and economy. Providers in those communities are in a unique situation and are often overlooked when broad, sweeping changes occur across the healthcare industry. They face different challenges and obstacles than their colleagues in urban settings. Rural communities tend to have a poorer aggregate health status, higher rates of uninsured, a shortage of healthcare workers and limited access to healthcare resources.

American Recovery and Reinvestment Act (ARRA) stimulus funding is intended to be an incentive for providers to automate their practices through meaningful use of electronic health records. Many rural providers are waiting for vendors to undergo certification for Phase Two of Meaningful Use, or, they cannot afford to make the change from their paper-based practice or antiquated electronic system.

It's essential for a provider to be able to refer a patient to a specialist, and then electronically forward the critical data for the specialist's treatment. The electronic exchange of relevant data will result in more informed decision-making at the point-of-care and reduce duplicate testing. This crucial data may include allergies, current medications and other information a patient may not remember in the specialist's office, but which helps the specialist make informed treatment decisions. The referring provider may choose to share family history, social history, procedures and treatment plan, to enable lower cost, higher quality healthcare.

Cerner recommends that Kansas Medicaid encourage its providers to use secure messaging to communicate with each other and with their Medicaid patients to improve care quality and lower costs. We expand on the topic of provider-patient electronic communication in *Provider-to-Consumer Secure Electronic Communication; E-mail and E-visits.*

Direct Project: Connecting Rural Providers with Secure Messaging

There are currently more than 50 participants, including Cerner, in the Direct Project. Cerner Direct™ is an encrypted Internet email channel based on Direct Project standards that enable ad hoc communication between authorized physicians, healthcare systems and patients within and across communities. Cerner Direct's goal is to "fill the gaps" in existing electronic information exchange.

We do this by enabling organizations to take the first step toward Meaningful Use requirements and supplying electronic data exchange capabilities for all providers, regardless of their existing technical resources. Expensive and complicated systems are not necessary–providers need only a computer with Internet access. Email accounts are secure and private, meeting HIPAA requirements.

Technologies like Cerner Direct allow providers a standalone inbox or the ability to send faxes to secure inboxes rather than traditional fax machines. In addition, providers with electronic health records (EHRs) can embed project-compliant messaging functionality directly within their native application. This is a quick, inexpensive method to get providers exchanging data.

Overcoming broadband access challenges

Several initiatives are underway to develop Kansas' broadband infrastructure. Last year, Kansas received $6.4 million in ARRA funding to map and plan its broadband infrastructure. To date, nine Kansas companies and organizations have received more than $147 million in ARRA grants and loans to expand broadband Internet infrastructure. According to Connect Kansas, 99.72% (more than 1 million Kansas households) have access to broadband service, including mobile broadband that is at least 768Kbps downstream and 200Kbps upstream as of October 2011.

Secure messaging could be launched statewide to give all providers and patients immediate access. Cerner recommends the state coordinate with ongoing broadband initiatives to target within its 105 counties rural Medicaid providers and patients that already have access to broadband infrastructure. Future rollout strategies could leverage additional geo-mapping capabilities. Available resources such as public health facilities and critical access hospitals, as well as statewide groups and associations may be leveraged to support the effort and provide credentialing. Cerner recommends the state focus on the counties outlined in the proposed KS SB198, an act concerning economic development through the creation of rural opportunity zones.

Rollout process

Small numbers of pilot providers may enroll through on-site, personal visits, but a broad rollout through personal visits is expensive, time-consuming and resource intensive. To avoid this, Cerner recommends a federated approach to credentialing users. Essentially, the state could credential users by leveraging an existing process that requires providers to prove their identity, such as the Medicaid enrollment process. Other innovative approaches toward credentialing could be explored as well.

Provider-to-Consumer Secure Electronic Communication; E-mail and E-visits

Across the nation, the provider-patient relationship is moving online. An estimated 68% of U.S. adults access the Internet to search for healthcare information. Naturally, many also want electronic access to their provider as a sort of "digital" house call.

E-visits, also known as online consultations, can be a simple email where the patient enters free-text information. It can also involve use of a solution that that utilizes logic to drive the conversation, perhaps directing the patient to make an office visit or see an emergency room if complications are met. E-visits are typically defined as interactions between patients and providers that occur online. They allow providers to dispense routine medical advice quickly and conveniently to a known patient population, and help control healthcare costs. Patients benefit from e-visits, with reduced travel time, reduced time off work, greater and timelier access to healthcare resources, quicker consultation time,

lower costs, and an overall improved relationship with their provider. The provider can see more patients, focusing on those who truly need a face-to-face consultation.

E-visits are effective for referrals, prescription refills and ongoing chronic disease management. A provider can respond while viewing the patient's actual record and have immediate access to past problems, current medications, allergies and test results. E-visits help the provider monitor treatment plans, such as antibiotic effectiveness or blood sugar levels, allowing them to intervene before problems occur.

The American Medical Association is "supportive of the use of online evaluation services between a physician and an established patient," stated spokeswoman Lisa Lecas. The American Academy of Family Physicians (AAFP) has for several years supported e-visits, which occur over safe, secure, online communication systems. AAFP defines an e-visit as "an evaluation and management service provided by a physician or other qualified health professional to an established patient using a web-based or similar electronic-based communication network for a single patient encounter."

AAFP outlines several guidelines for e-visits:

- E-visits are available only to established patients who have previously received care from the provider's practice
- Patient must initiate the process and agree to e-visit service terms, privacy policy and charge
- Electronic communication must occur over a HIPAA-compliant online connection
- E-visit includes the total interchange of communications associated with the single patient encounter
- Provider documents the e-visit and all pertinent related communication in the patient's health record
- Provider has a defined period of time to complete responses
- E-visits should be a payable physician service

Despite the benefits and endorsements, the adoption of e-visit requirements and reimbursement is minimal. Privacy concerns and reimbursement are the two primary challenges. Privacy and security are integral elements to technologies that leverage the Direct Project standards, such as Cerner Direct, and technologies that provide online forms and logic to drive communications, such as Cerner eVisits™. In both, providers and patients are assured of privacy protections that meet HIPAA compliance, such as password protection and encrypted transactions. Advanced technology features allow the provider to manage his e-visits by diagnosis and assign follow-up to others on the care team. The e-visit and its results are also fully integrate into the provider's EHR and the patient's health record (PHR).

Providing patients with a mechanism to communicate securely with their providers is a first step to making them health consumers, accountable for their actions. These patients should also be introduced to a PHR and learn how to make more healthy decisions. This level of consumer engagement is crucial to the success of a patient-centered medical home (PCMH).

Rollout Process

Cerner recommends that Kansas launch several pilots for e-visits with selected providers and their Medicaid patients with chronic conditions, such as diabetes. Several considerations should drive the choice of Medicaid patient populations to pilot and rollout enrollment in e-visits. The state could focus on a group of providers who treat high-cost patients or patients with chronic conditions. After

providers are set up with an account in the state's Direct email system, they could "identity proof" their patients using a state-controlled process whereby a provider assigns email accounts to patients. Otherwise, the state could identity proof patients during Medicaid enrollment, or via the future health insurance exchange. Other options include community healthcare resources, such as pharmacies.

Encourage through appropriate incentives

Currently, just 12 states have enacted laws requiring health plans to pay for telemedicine services, and generally, e-visits fall under that category. As of last year, less than 5% of providers communicating online with their patients were being paid to do so. A few insurance companies, such as *Cigna, Aetna, Anthem* and *Humana*, reimburse providers for online clinical consultations. While Medicare currently does not reimburse for e-visits, there are some ongoing initiatives that point toward mainstream integration. As a result of healthcare reform, the Center for Medicare and Medicaid Innovation has been established to facilitate technology for doctors to leverage video chats, telephone checkups and in-home monitoring devices. In addition, the Department of Health and Human Services recently issued $220 million in grants to 15 communities around the country to create three-year pilot programs to test the adoption of healthcare technology, including e-visits.

Without payment incentives, overworked and under-resourced providers may view email communication as another uncompensated task that complicates their over-booked schedules. Consumer pressure goes only so far; providers need incentive to leverage electronic communications. Arguably, a provider who successfully implements e-visits in his practice and receives appropriate reimbursement can open his doors to additional Medicaid patients. Eventually, e-visit technology will become standard capability in providing care.

Kansas Medicaid currently excludes email communication from its definition of reimbursable telemedicine services. To facilitate the advancement of e-visits by Kansas Medicaid providers, the state would need to address policy issues related to reimbursement and provider liability, and educate Medicaid patients that e-visits are comparable to in-person visits. Further policy considerations include whether e-visits require in-state licensing and limitations to prescribe based on secure, online communications.

Expected outcomes include reduced savings from fewer in-person provider visits, fewer emergency room visits, higher rates of compliance with treatment protocols and better health outcomes. In addition, Medicaid providers who participate will have lower panel hold statuses.

About Cerner

Providing enabling technology and services to the healthcare sector is the sole focus of Cerner's business. For more than three decades we have provided innovative HIT and resources that cross traditional public, private, geographic and organizational boundaries. Cerner's fundamental approach is to facilitate the intersection of these differing perspectives and requirements through the provision of solutions and services to meet the broader needs of the collective. Cerner recognizes that everything we provide in collaboration with our healthcare partners must be flexible and configurable to meet specific considerations required by multiple healthcare perspectives, needs, approaches, organizations and communities.

Since its founding in Kansas City, Mo., in 1979, Cerner's vision has been anchored by the belief in interoperability as a core component of person-centric healthcare systems based on best practices. We understand the complex nature of healthcare and the IT needs of an effective and efficient health information network. This depth of understanding evolves from decades of work, thousands of implementations and a relentless commitment to bettering the delivery of healthcare.

The ability to sustain and strengthen effective and mutually beneficial relationships with third-party partners and our clients is essential to Cerner's past and future success. Working together with more than 8,500 clients worldwide, Cerner connects clinical, lab and administrative healthcare data across communities, states and entire countries. Organizations including HIEs, laboratories, pharmacies and home health groups partner with Cerner across the state. We rank among the top three providers of EHRs to Kansas hospitals, but our commitment to Kansas goes well beyond that of a HIT vendor.

In addition to our work within the state, Cerner has a long history of partnering to create and scale a significant range of global-class networks. Cerner has:

- Provided technology design and solutions, hosting, project management, training and comprehensive support services to regional, state and country-wide HIE initiatives
- More than three decades of experience with healthcare transactions of all types
- Securely processed more than 45 million medical claims in the past year across ambulatory and acute care markets
- Successfully carried out more than $17 billion in healthcare claims transactions in the past year
- Built the Choose and Book appointment and referral request system in the United Kingdom, which processes 21 million appointments annually
- Set up a nationwide H1N1 surveillance tool in less than 60 days across 800 hospital lab systems in 48 states at the request of the U.S. Secretary of Health and Human Services
- Created the *Lights On Network*®, a monitoring system that enables clients to ensure 99.9% uptime
- Connected more than 30,000 foreign system interfaces to Cerner systems, including all major EMRs used by Kansas providers

Cerner invests in the Kansas economy. Of Cerner's $550 million-plus annual local payroll, $129 million is to Kansas residents. In the past six years, Cerner has hired 1,519 Kansas residents and nearly 900 students from six Kansas-funded universities. Cerner is also currently developing office space at Village West, which is expected to create 4,000 jobs by 2016. The estimated economic impact, including employee salaries, leasing income and indirect business taxes, is $528 million, which will generate $17.6 million in additional income, sales and property taxes.

Cerner also partners with the Blue Valley school district's Center for Advanced Professional Studies (CAPS) on projects, including: mobile phone application for families of hospital patients, client facing video exploring the complex healthcare setting, and a promotional video for Cerner's KCIT program. Cerner believes it's critical to invest in education with a goal of offering technology training to develop a skilled IT workforce. As such, we support or develop work-based learning opportunities that put students in an environment where they can hone skills involving critical thinking, communication and a broad understanding of how their studies apply to real world challenges.

Cerner and the DIrect Project

Cerner associate, Dr. David McCallie, vice president of Medical Informatics, is a member of the HIT Standards Committee--the standards-making body of the Office of the National Coordinator for Health Technology. Dr. McCallie has also been instrumental in the design and development of the Nationwide Health Information Network (NHIN)-Direct project. Along with Wes Rishel of Gartner, he proposed a simple, secure and standards-based clinical messaging system in a series of blog posts on the Gartner web-site. His posts got the attention of the ONC, which then launched the NHIN-Direct. The Direct Project is described as a simple, secure, scalable, standards-based way for participants to send authenticated encrypted health information directly to known, trusted recipients over the Internet. Current pilots in the Direct Project show successful integration with EHR systems, health information exchange (HIE) technologies, and PHRs, such as Cerner® Healthe Record™ and Microsoft® Healthvault™. (Additional information can be located at http://directproject.org.)

In addition to Dr. McCallie's efforts, Cerner is a leading contributor to the Direct open source computer code that will be used in the upcoming Direct projects. Cerner continues to be an active participant in the Direct Project. We are the primary contributor to the Java Reference Implementation, creating the core components upon which many health Internet service providers (HISP) will be built.