



Program Protocols

Includes: Planning Protocols and Funding and Mechanics Protocols

Delivery System Reform Incentive Payment (DSRIP) Pool

Submitted by the Kansas Department of Health and Environment,
Division of Health Care Finance

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Preface

This document serves as Attachments F and G to the Special Terms and Conditions (STCs) of the Kansas KanCare Section 1115 Demonstration Waiver. The following pages outline all required elements for the DSRIP planning and funding and mechanics protocols as specified in STC 69 (e) and (f).

1. Background, Goals and Community Health Context in Kansas

Background

The DSRIP pool program will be implemented in Kansas as part of a major delivery system overhaul that converted nearly all Kansas Medicaid and CHIP populations and services into a risk-based capitated managed care program. That program is known as KanCare and represents one of the largest reform efforts for the Kansas Medicaid and CHIP programs in recent years.

The goals of the KanCare program are to improve overall health outcomes while slowing the rate of cost growth over time. This will be accomplished by providing the right care, in the right amount, in the right setting, at the right time. The selected KanCare managed care plans focus on ensuring that consumers receive the preventive services and screenings they need and ongoing help with managing chronic conditions. The DSRIP program will work alongside the KanCare health plans and the State to further promote delivery system reform with the end goals of improved outcomes and decreasing costs.

Unlike other state DSRIP programs, the Kansas DSRIP pool will have only two participants—the members of the Large Public Teaching Hospital (LPTH) and Border City Children's Hospital (BCCH) pool (The University of Kansas (KU) Hospital and Children's Mercy Hospital). Each of the participating hospitals is unique in its ability to impact the systemic delivery of care across Kansas.

DSRIP and Healthy Kansans 2020- Public Health and System Reform Collaboration

Due to the statewide emphasis of the DSRIP program, Kansas considered the three-part aim of the Section 1115 waiver, the goals of DSRIP and how to best align these initiatives with the efforts already in process throughout Kansas to improve health and the health care delivery system. The Healthy Kansans 2020 (HK2020) initiative emerged as an important effort already underway in Kansas.

The Healthy Kansans Steering Committee began meeting in August of 2012. The Steering Committee is comprised of the leaders of more than 35 organizations across the state, and was gathered together to discuss the health issues facing Kansans. The Steering Committee used the Healthy People 2020 objectives as a springboard for discussion, but the primary focus was ensuring that the unique issues facing Kansas in the coming years were addressed. The Steering Committee represents a broad array of stakeholders in Kansas, and includes membership from health care providers, consumer groups, state and local government entities, and other groups.

The result of the Steering Committee's efforts was a document identifying the cross-cutting themes and priority strategies that will be used to drive health improvement initiatives. Three cross-cutting themes were identified by the HK2020 Steering Committee:

- Healthy living,
- Healthy communities, and
- Access to services.

Eleven priority strategies to drive health improvements in the three cross-cutting areas were selected.

Given the deliberate process, stakeholder engagement, and strategic focus of the HK2020 Steering Committee's work, the Kansas DSRIP project team recognized an opportunity to capitalize on the wealth of knowledge and experience that went into the development of the priority strategies. After consultation with additional DSRIP hospital stakeholders and partners at the federal Centers for Medicare and Medicaid Services (CMS), the Kansas DSRIP project team decided to use the priority strategies as a basis for the DSRIP focus areas and the overall goals of the DSRIP program. The goal of this approach was to build upon the intentional, focused work that had already been completed in Kansas, and to provide a future path for meaningful integration of DSRIP projects across Kansas communities and the existing health system infrastructure across the state.

Using the priority strategies as a guide, the DSRIP project team then produced a draft list of focus areas to discuss with stakeholders. The draft focus areas attempted to capture the goals and strategies identified by the HK 2020 process, while translating them into a format that could easily be used for the development of actual DSRIP hospital projects in the future.

Stakeholder Input Process from the Healthy Kansans 2020 Steering Committee

After creating the draft focus areas for stakeholder input, the DSRIP project team worked with staff in the Kansas Department of Health and Environment's (KDHE) Division of Health to reconvene the HK2020 Steering Committee. The purpose of this meeting would be twofold: to provide input on the proposed focus areas, and to provide the Steering Committee with an example of how their priority strategies were already being put into practice in the state. To prepare for this discussion, the Steering Committee received information about the DSRIP program, background information on why their input was important and necessary for the program's success, and the draft version of focus areas produced by the project team.

On March 14, 2013, the DSRIP project team met to discuss and receive input from the Steering Committee on the draft focus areas. The meeting included several presentations designed to help participants understand what the DSRIP program is and how it relates to the HK2020 project. Participants heard information from Ms. Kari Bruffett of the Division of Health Care Finance (DHCF), who provided an overview of DSRIP, the program goals, funding involved, and requirements for participating hospitals and the state Medicaid program. Ms. Bruffett also went over the proposed focus areas for DSRIP and described how the HK2020 priority strategies were used in their development. Then each of the participating hospitals presented on past hospital projects that served as examples of how their organizations could produce meaningful impacts on the service delivery system statewide.

Later in the meeting, Steering Committee members broke out into smaller roundtable discussion groups to consider the following questions:

- Given what you have learned about DSRIP today, what is your reaction to the focus areas selected – are they the right ones?
- Does the way we have synthesized HK2020 priorities make sense for DSRIP?
- Are there issues from HK2020 that we should add to the DSRIP focus area list?
- Which of the focus areas is the best fit for DSRIP? Are there clear priorities? Are there some that do not fit as well?
- What would a quality improvement process, similar to what KU Hospital and Children's Mercy outlined today look like in your organization? Are you currently using HK2020 priorities in your organization's QI processes?
- How has your organization used HK2020 priorities to date in other ways (recognizing that the priorities are fairly "new")?
- What suggestions do you have for KDHE with regard to how to make HK2020 more inclusive and actionable with respect to achieving improved health outcomes (besides DSRIP)?

As evidenced by the discussion questions, the DSRIP project team and KDHE Division of Health staff members not only intended for the Steering Committee to assist in refining the focus areas, but also to consider how the priority strategies for HK2020 could find other practical applications throughout participants' organizations. DSRIP serves as an example of how the HK2020 process could provide the basis for actual system reform projects that will impact the health of Kansans.

Summary of Input

The roundtable discussions produced helpful insights and information for the DSRIP project team that was integrated into the proposed focus areas. Some input was also helpful as the DSRIP project moved into the development of protocols and specific hospital DSRIP projects.

The list below summarizes the key areas of input provided by stakeholders. Overall, stakeholder participants expressed excitement over the DSRIP program, and the opportunity to work with the participating hospitals.

- Overall, participants expressed that the alignment and translation of HK2020 strategies into focus areas was appropriate.
- Participants generally expressed satisfaction with the focus areas, noting that they would allow for numerous projects and strategies for health improvement.
- The proposed focus areas were sufficiently broad to allow for innovation by the hospitals to create projects that will produce true reform.
- The focus areas should support the involvement of a variety of community partners, including community health providers, schools, local farmers' markets and other organizations.
- Disparate populations should not be lost in focus areas or DSRIP projects. Although they are not an explicit area of focus, the needs of these populations should be considered in any and all DSRIP projects.
- The focus areas should allow for projects that improve supports for the social and emotional development of children and families.
- Participants emphasized that the focus areas should allow the hospitals to work in their areas of expertise, and involve community partners for their expertise as well.
- Participants would like to see proposed DSRIP projects work toward eliminating silos in the care delivery system.

- Participants expressed their support for DSRIP projects that truly produce statewide impacts.
- The focus areas should allow for the inclusion of oral health and dental programs.
- Environmental factors (such as clean air and water programs) should be included in focus areas and projects as needed.
- The focus areas should produce projects that help make healthy choices for individuals easier and focus on prevention.

KDHE also sought and received volunteers from among the Steering Committee to advise the DSRIP project team through focused input on the DSRIP planning and funding and mechanics protocols, as well as specific hospital DSRIP plans.

DSRIP Goals and Focus Areas

The three cross-cutting themes developed by the HK 2020 Steering Committee also serve as the overall goals of the DSRIP program, and embody the results that Kansas will attempt to achieve through DSRIP:

- Healthy living,
- Healthy communities, and
- Access to services.

The list below comprises Kansas' DSRIP focus areas. The focus areas have been revised according to the stakeholder input received.

1. Increase access to services, including primary care and preventive services
2. Increase the effective and efficient use of population health management through health information technology (HIT)
3. Increase integration of the health care delivery system, including medical, behavioral health, and social services.
4. Improve health literacy, including nutrition education and tobacco use prevention and control
5. Expand health and wellness programs and develop incentives for participation in these programs
6. Expand chronic and complex care management models

2. Public Input Process for DSRIP Protocols

Following the collaborative input process with HK2020 Steering Committee members, Kansas moved to the next phase of DSRIP program development—the planning and funding and mechanics protocols. To elicit meaningful public input during this phase of program development the State used three primary strategies:

- Continued Steering Committee involvement,
- A public webinar, and
- Posting the draft protocols on the KanCare website.

Discussion and input continued from HK2020 Steering Committee members. This included sharing draft documents and portions of the DSRIP protocols with stakeholders to allow for focused input.

Additionally, the State held a public webinar on April 26, 2013 to solicit input on the draft focus areas and DSRIP protocols. During the webinar, participants heard general information about the DSRIP program, the selected focus areas, examples of population-focused improvements that hospitals will endeavor to achieve, and other specific components of the draft protocols. The webinar also sought participant input on the state's plan for independent evaluation of DSRIP projects and the review process for evaluating the hospitals' progress in meeting DSRIP metrics.

During the webinar, participants were asked to provide input on a number of specific protocol elements. Below is a list of questions that were discussed.

1. Do you believe the selected focus areas are appropriate for the DSRIP program?
2. Are there focus areas you are particularly interested in seeing the hospitals utilize when designing their projects?
3. Kansas is fortunate to have the ability to build upon the work of our public health partners. Are there additional goals and community needs that you would like to see incorporated into the DSRIP program?
4. What do you think of the hospital plan review process and criteria?
5. Are there additional elements the State should consider in our review of the hospital plans?
6. Are there other elements you would like to see included in our overall evaluation of DSRIP?
7. Do you have suggestions for category 4 milestones or metrics that would be valuable to the Kansas delivery system?

Following the webinar and additional discussions, a draft version of the planning and funding and mechanics protocols was posted onto the KanCare website in May 2013 for public education and input. Kansas encourages any and all interested stakeholders to provide their input and feedback on all areas of the protocols via an email submission process. The results of this process will be incorporated into the final protocol documents as approved by CMS.

3. Hospital Projects and Project Metrics

This section presents a menu of projects including Category 1, 2, 3 and 4 measures from which eligible DSRIP hospital participants may select when designing their individual hospital DSRIP plans. Within each project, hospitals must select infrastructure, process, and quality and outcomes milestones and related metrics, as well as population-focused improvements to report. Reported metrics and population-focused improvements must support the goals of the projects selected.

For information regarding required reporting of common Category 4 measures, please see section 4, Common Project Milestones, below.

Project 1: Expansion of Patient Centered Medical Homes and Neighborhood

Background

Access to comprehensive, quality health care services is important for the achievement of health equity and for increasing the quality of a healthy life for everyone. Access to care impacts overall physical, social, and mental health status; prevention of disease and disability;

detection and treatment of health conditions; quality of life; preventable death; and life expectancy.

Access to health services means the timely use of personal health services to achieve the best health outcomes. It requires three distinct steps: 1) Gaining entry into the health care system; 2) Accessing a health care location where needed services are provided; and 3) Finding a health care provider with whom the patient can communicate and trust.¹

This project will promote the **Patient Centered Medical Home** (PCMH) model to transform how primary care is organized and delivered in Kansas communities. Components of the PCMH DSRIP project would meet multiple DSRIP Focus Areas including increasing access to primary care services and increasing the effective and efficient use of population health management through health information technology.

Kansas City health care facilities provide services to areas with one of the highest rates of childhood poverty—as large as 32.8% according to the US Census report. Children born into poverty have higher rates of low birth weight. The combination of impoverished, minority populations coupled with lack of available health care leaves Kansas children at great risk for health disparities. The PCMH model of health care delivery specifically addresses access and comprehensive care needs to directly impact health outcomes by focusing on a proactive system focused on preventative health care services.

Childhood asthma is increasing in the United States, especially among minority inner-city children, and has a major impact on their health. Asthma is the number one reason children miss school due to chronic illness, and the second leading cause of children's emergency department visits.²³⁴ The rapidly increasing rates of asthma are thought to be related to increases in allergies and environmental exposures, such as mold, moisture and other allergens. Another factor that worsens asthma is the lack of access to health care. The PCMH model offers care coordination in order to improve self-management support. Population management through targeted outreach efforts using disease management registries also improves outcomes in high risk population.

Because housing in some of our communities is older, it leads to significant environmental hazards, including exposure to lead-based paint and increased asthma triggers. The reading proficiency of this project's target population is lower, leading to reduced health literacy. Studies have shown that patients with poor literacy skills receive less preventative care, have less knowledge about chronic conditions, perform more poorly at asthma self-care and have worse outcomes than those with better literacy.⁵⁶⁷⁸ Access to care and correct diagnosis will have only

¹ Healthy People 2020 (www.healthypeople.gov)

² Doull I, Williams A, Freezer N, Holgate S. Descriptive study of cough, wheeze and school absence in childhood. *Thorax*. 1996;51(6):630-631.

³ Rana U, Jurgens S, Mangione S, Elia J, Tollerud D. Asthma prevalence among high absentees of two Philadelphia middle schools. *Chest*. 2000;118(4):79S.

⁴ Moonie, Sheniz, Sterling, D, Castor M. Asthma Status and Severity Affects Missed School Days. *J Sch Health*. 2006;76(1):18-24)

⁵ Scott TL, Gazmararian JA, Williams MV, Baker DW. 2002. Health literacy and preventive health care use among Medicare enrollees in a managed care organization. *Medical Care*. 40(5): 395-404

⁶ Williams MV, Baker DW, Honig EG, Lee TM, Nowlan A. 1998. Inadequate literacy is a barrier to asthma knowledge and self-care. *Chest*. 114(4): 1008-1015.

⁷ Schillinger D, Grumbach K, Piette J, Wang F, Osmond D, Daher C, Palacios J, Sullivan G, Bindman AB. 2002. Association of health literacy with diabetes outcomes. *Journal of the American Medical Association*. 288(4): 475-482.

marginal impact on a child's health if the parents cannot understand the treatment recommendations. Communication in a culturally competent manner and in a form that may be understood by the caregiver is also essential. This is one of the goals of PCMH implementation.

The PCMH encompasses five functions and attributes, specifically the provision of primary care that is (1) patient centered, (2) comprehensive, (3) coordinated, (4) accessible, and (5) high quality.⁹ Conceptually, the PCMH project would include such activities as using evidence-based medicine and clinical decision-support tools to guide shared decision making with patients and families, engaging providers in performance measurement and improvement, and measuring and responding to patient experiences and patient satisfaction.

A Medical Neighborhood is also an important part of supporting the medical home. At times, a patient may require care by physicians and other health care professionals outside of a patient's Medical Home. Often, this involves specialty care which is delivered at a tertiary care center. An effective medical neighbor engages in processes that ensure: (1) bidirectional communication, coordination and integration, (2) Appropriate and timely consultations or referrals, (3) Determination of responsibility in co-management situations, (4) Patient-centered, enhanced access to care, and (5) High levels of quality and safety.

Collaborative Care Agreements, sometimes called Care Compacts, are used to define the relationship and needs of the primary care provider, the specialist and the patient. These agreements delineate if the specialist is to answer a specific question, make a diagnosis and recommend a treatment plan, perform a necessary procedure, co-manage the patient for the course of the disease or assume complete management of the patient. Current practice does not typically include these types of agreements. Implementation of Collaborative Care Agreements will reduce unnecessary referrals, specialist to specialist referrals and allow the patient-centered medical home to effectively coordinate care.

Project Goal
Expand and promote the Patient Centered Medical Home (PCMH) model to three distinct provider types, specifically, a hospital-employed group of pediatricians, an urban/suburban pediatrics practice and two rural clinics.
Develop processes and practices in specialty and subspecialty clinics that will promote and support the patient-centered medical home.
Project Focus Areas
<ol style="list-style-type: none">1. Increase access to services, including primary care and preventive services;2. Increase the effective and efficient use of population health management through health information technology (HIT); And3. Increase integration of the health care delivery system, including medical, behavioral health, and social services.
Potential Project Elements
<ol style="list-style-type: none">1. Position hospital-owned primary care clinics to apply for NCQA¹⁰, or comparable, certification as a Patient Centered Medical Home (PCMH).

⁸ Parker R, Ratzan S, Lurie, N. Health Literacy: A Policy Challenge For Advancing High-Quality Health Care Health Aff July 2003 vol. 22 no. 4 147-153

⁹ Agency for Healthcare Research and Quality PCMH Resource Center, June 2012

¹⁰ The National Committee for Quality Assurance (NCQA) is a non-profit organization that was established in 1990 and designed to improve health care quality. The organization manages voluntary accreditation programs for

2. Position network-affiliated non-owned clinics to apply for NCQA, or comparable, certification as a Patient Centered Medical Home.
3. Implement improvements in specialty and subspecialty ambulatory care processes that enhance the effectiveness of the Patient-Centered Medical Home.
4. Improve Data Exchange between hospital(s) and affiliated medical home sites
5. Empanel patients who would most benefit from medical homes

Category 1 Measures

Measure	Metric	Data Source
Build and define PCMH implementation team	Identification of team members	Internal job descriptions
Conduct gap assessment of clinic(s) against NCQA PCMH criteria	Develop and implement a work plan to complete gap analysis against NCQA PCMH recognition criteria	Documentation of the gap assessment.
Build and define a Medical Neighborhood Implementation Team	Identification of Team Members	Internal Job Descriptions
Conduct a gap assessment of processes necessary for specialty support of PCMH	Develop and implement a work plan to address gaps	Documentation of gap assessment.

Category 2 Measures

Measure	Metric	Data Source
Develop action plan for NCQA PCMH implementation	Documentation submission of the PCMH implementation work plan	PCMH Implementation Action Plan
Percentage of Targeted Practices Recognized as PCMH	X Percent of Hospital-owned Clinics recognized PCMH X Percent of Network-affiliated clinics recognized PCMH	NCQA Recognition Documents
Develop an action plan for specialty support of PCMH	Submission of Specialty PCMH Support Plan	Specialty PCMH Support Plan
Develop PCMH primary care site near hospital emergency department (ED) for urgent non-emergency care	Establish PCMH primary care with urgent care service at site within close proximity to hospital ED to provide non-emergency urgent care services Expand office hours to include urgent care service on weekends and evenings	Reports from Hospital

Category 3 Measures

Measure	Metric	Data Source
Percentage of Patients Referred to Subspecialty Care with a Collaborative Care	X Percent of In-system referrals have Collaborative Care Agreement	Hospital Electronic Health Record (EHR)

individual physicians, medical groups and health plans. NCQA develops and maintains a widely used set of performance measures (HEDIS) that allow comparison to national or regional benchmarks. In 2008 NCQA developed one of the first set of voluntary standards for the recognition of physician practices as Patient Centered Medical Home.

Agreement	X Percent of Outside Referrals have a Collaborative Care Agreement	
Percentage of Patients Attributed to Hospital-Owned Primary Care who are assigned a PCMH	X Percent of Patients who have an assigned PCMH	Hospital EHR
Decrease Inpatient visits and length of stay	X Admissions/1000 patients in PCMH Avg LOS (length of stay) for patients in PCMH.	Billing/PHIS Databases Claims Data Business objects report from Electronic Medical Record (EMR)
Height/Weight/BMI screening	X% of patients in PCMH will have a height and weight documented at each well child visit and BMI at each well child visit after 2 years of age	Business objects report from EMR Chart Review for network-affiliated practices
Increase Immunization Rate	X% of patients in PCMH who have completed recommended immunizations	KS Immunization Registries Claims Data Business Objects Report form EMR Chart Review
Reduce ED Visits for asthma	Average # of ED visits per year for PCMH patients who have a diagnosis of asthma	Claims Data
Category 4 Measures		
Measure	Metric	Data Source
Reduce ED utilization	X ED Visits/1000 pts for patients in participating PCMH	Billing/Public Health Information System (PHIS) Databases Claims Data Business objects report from EMR
Decrease Readmissions	30 day Readmission Rate for same/related problem	Claims Data

Project 2: Concussion Management

Background

A study from the American Association of Neurological Surgeons reported an estimated 446,788 sports-related head injuries treated in U.S. hospital Emergency Departments (EDs) in 2009. The number represented an increase of nearly 95,000 sports-related injuries from the prior year.

Concussion is the most common form of head injury suffered by young athletes. It is a type of traumatic brain injury that occurs when the brain is violently jarred back and forth or rotated inside the skull as a result of a blow to the head or body. This can "stun" the brain cells or even result in their death. Any athlete in motion is at risk for a concussion. This may occur in any

sport, boys and girls alike. Symptoms may appear immediately or develop over time and may last a few days to several months. Concussive syndrome interferes with schoolwork and social life. The impact of concussions can have long term or permanent effects on a student's life, including ability to learn and return to sport. In addition, student athletes who suffer a concussion are at risk for Secondary Impact Syndrome which is potentially life threatening.

Based on Kansas law, any student participating in athletics or spirit must have on file with the school a Concussion and Head Injury Information Release Form signed by both a parent/guardian and the student. The key to concussion management is recognition of signs and symptoms and an evidenced-based approach to return-to-learn and return-to-play. Although not required by the Kansas law, student athletes participating in club sports need to follow the same evidence-based practice protocols to assure their health and safety. Club sports need the resources and education to comply with the state recognized recommendations.

There are many tools available to assist in concussion management. Many concussion management programs utilize "ImPACT," a **computerized neurocognitive assessment tool** that assists healthcare providers in determining an athlete's ability to return to play. The ImPACT test can be utilized as a baseline screening tool or to trend recovery after suffering a concussion. There are also several electronic applications that are available or in development that could be utilized. A University of Kansas researcher is evaluating a smart phone app that measures balance. One tablet app in development includes voice analysis. Before and after a sporting event, a competitor would speak into the tablet's microphone. The app would then take the two voice samples and compare them, searching for signs of traumatic brain injury, including changes in pitch, distorted vowels, hyper-nasality, and poorly pronounced consonants. There are other apps available for purchase that allow sideline evaluation. This program will include an assessment of and recommendations for implementation of community selected apps.

Prevention is also an important component of concussion management. This project would also provide evidenced-based recommendations including materials that will help educate athletes, parents, and school officials about sports-related concussions. Prevention tips in the form of posters and pocket cards will be provided, as well as an evaluation and recommendation of appropriate precautions such as helmets and mouth guards.

This project would also create community-based Learning Collaborative Arenas (LCAs) that will improve and increase adherence to national guidelines for pre-hospital and clinician management to sports-related pediatric concussion. LCAs are a validated performance improvement approach to disseminate evidence-based practices across multiple systems. LCAs for concussion management span the continuum of care for student athletes and include the students, parents, coaches, teachers, athletic trainers, Emergency Medical Services (EMS) providers and healthcare clinicians from primary care to emergency management and definitive referral.

Project Goal
This project will improve the health and welfare of children and provide partners across the state with evidenced-based practice management guidelines, resources, and support to maintain compliance with state statutes regarding concussion management. This will be achieved by creating LCAs that improve and increase adherence to national guidelines along the continuum of care for sports-related pediatric concussion.

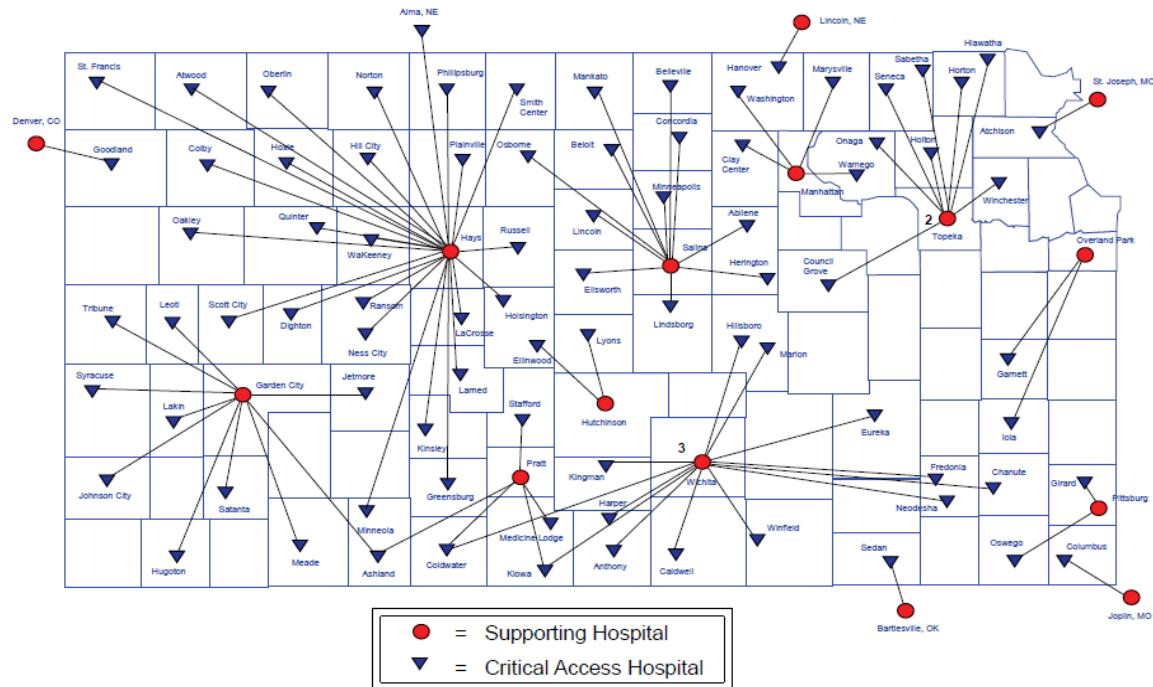
Project Focus Areas		
1. Increase access to services, including program care and preventive services;		
2. Increase the effective and efficient use of population health management through health information technology (HIT);		
And		
4. Improve health literacy, including nutrition education and tobacco use prevention and control.		
Potential Project Elements		
<ol style="list-style-type: none"> 1) Create a menu of onsite and technology-supported learning activities to meet training needs across communities 2) Develop a train the trainer module that communities can utilize for sustainability 3) Increase knowledge of signs and symptoms of concussion and evidenced based interventions at all levels 4) Develop a sustainable community action plan 		
Category 1 Measures		
Measure	Metric	Data Source
Identify community based learning collaborative arenas	<p>Number of LCAs within Rural Health Network regions.</p> <p><i>The state-designated Rural Health Network is an alliance of members consisting of one or more Critical Access Hospitals and at least one other hospital (usually known as a "Supporting Hospital") that have developed a comprehensive plan regarding patient referrals, the provision of emergency and nonemergency transfers among members, the development of a network-wide emergency medical services plan, and the development of a plan for sharing patient information and services between hospital members concerning medical staff credentialing, risk management, and quality assurance/improvement and peer review. See diagram on page 14 below.</i></p>	Reports from hospital
Identify one community partner from each listed entity	<ul style="list-style-type: none"> • Hospitals • Clinics • Primary Care Providers • Physicians • EMS • Fire Departments • Local Health Departments • First responders • Parents • Teachers • Coaches 	Reports from hospital

	<ul style="list-style-type: none"> • Athletic Trainers • Sports clubs 	
Website infrastructure	Development of SharePoint and teleconcussion management site	Reports from hospital
Database development	Participation in database and or Health Information Exchange specific to concussion	<ul style="list-style-type: none"> • Research Electronic Data Capture (REDCap) a secure, web-based application designed exclusively to support data capture • Health Information Exchange (HIE) Data
Category 2 Measures		
Measure	Metric	Data Source
Develop “train the trainer” materials 1) Recognition of and signs and symptoms of concussion 2) Step-wise evidenced based management approach	<ul style="list-style-type: none"> • Number of contacts • Materials distributed 	Reports from hospital
Utilization of website	Website hits	Website data
Teleconcussion consults (utilizing telemedicine infrastructure)	Number of teleconcussion consults	Reports from hospital
Baseline # of youth activity-related concussions	<ul style="list-style-type: none"> • Total number of concussions • Number of concussions by cause 	RedCap, KSHSAA, and or HIE Data
ImPACT training	Number of participants with ImPact training within LCA	ImPact data base
Disbursement of train the trainer materials	Number of participants at all levels within learning community that participate in training	Reports from hospital
Disbursement of collaterals	Number of collaterals distributed	Reports from hospital
Training event participation	Number of participants	Reports from hospital
Category 3 Measures		
Measure	Metric	Data Source
Public awareness of concussion management	Survey	RedCap or Survey monkey
ImPact Test	Number of baseline and post-injury ImPact tests administered within LCA	ImPact data base
Return to play forms	Number of return to play forms	RedCap

	completed	
Category 4 Measures		
Measure	Metric	Data Source
Emergency Department (ED) visits for pediatric activity-related traumatic brain injuries	Number of concussion-related ED visits	Hospital reports on ED data

KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT
Office of Rural Health

State Designated Rural Health Networks February 2013



Project 3: Self Management and Care (SMAC)/Resiliency

Background

A recent policy statement by the American Heart Association, published in *Circulation* (May, 2012), noted that 2.42% or 24 per 1,000 adults in the US have heart failure (HF), which equates to approximately 52,392 Kansas in 2012. According to the policy statement, the prevalence of heart failure is projected to increase to 2.97% of US adults by the year 2013. The average total cost of HF per US adult is approximately \$107, costing Kansas approximately \$231.6M in 2012. The average cost of HF is projected to reach \$244 per US adult in 2030.

The statement predicts the number of people with HF could climb 46% from 5 million in 2012, to 8 million in 2030. Direct and indirect cost to treat HF could more than double from \$31 billion in 2012 to \$70 billion in 2030.

The rising incidence of HF is fueled by the aging population and an increase in the number of people with conditions such as ischemic heart disease, hypertension and diabetes—contributors to the development of HF. Being older, a smoker, a minority or poor are also risk factors¹¹. HF is a chronic, life-threatening condition when the heart has been weakened and can no longer pump enough oxygen- and nutrient-rich blood throughout the body. It is the leading cause of hospitalization for Americans over age 65.

In addition, it is recognized that the skills for adequate self-management of chronic disease, with the support of family and/or caregivers, have many benefits including limiting the need for hospitalizations, reducing healthcare costs, as well as improving functional status and overall quality of life. Psychosocial factors play an important role in a patient's ability to carry out self-management skills. For example, health literacy, presence of depression or anxiety, and social isolation have been shown to be associated with decreased treatment compliance, mortality, and increased hospital admission rates in heart failure patients.

It is also known that illness affects the entire family, creating anxiety and sometimes significant dysfunction in the system. Caregiver stress is complicated by changing roles in the family, financial uncertainty, feelings of helplessness, and the adjustment of the entire family to living with a chronic illness¹². The resilience training portion of this program is designed for the patient and entire family/ support system. Therefore, the program will teach the supporters as well as the patients skills that will help them bend without breaking and handle whatever comes their way.

The evidence for this model was generated by a \$3.3 million National Institutes of Health (NIH) grant that utilized educational programming based on American Heart Association (AHA)/American College of Cardiology (ACC) guidelines, and was facilitated in group discussions with HF patients. Award-winning teaching materials, counseling, and contact with social workers, dieticians, pharmacists, and psych nurse specialists demonstrated decreased number of hospitalizations, improved quality of life, and less depression in this at-risk population. The program expands the chronic and complex care management models currently in place.

In this project, there will be additional psychosocial programming to enhance and reinforce the self management and care (SMAC) training by teaching ten facets that are known to increase resilience and self-management. Those facets are: the ability to self-calm, the ability to self-replenish, hope, optimism, physical self-care, sense of coherence, hardiness, non-judgment/self-support, emotional expressiveness, and social support. This program will be available to the patient and their entire support system.

Project Goal

The goal of this project is to implement an evidence-based heart failure (HF) program promoting Self-Management And Care (SMAC) strategies involving patients, their family members and multidisciplinary professionals in group clinics. The programming is a combination of tested and

¹¹ Heart Disease and Stroke Statistics--2012 Update : A Report From the American Heart Association; *Circulation*. 2012;125:e2-e220.

¹² Sheridan, C.L. and Radmacher, S.A. (1998) The Personal Style Inventory: A Measure of Stress Resiliency. In C. P. Zalaquett and R. J. Wood (1998) *Evaluating Stress: A Book of Resources*, Vol. 2, Lanham, Maryland, Scarecrow/University Press, 221-237.

validated teaching/learning modules, 4 weekly group sessions, and ongoing support and programming provided by a community-based department of the hospital that specializes in psychosocial programming.

Project Focus Areas

3. Increase integration of the health care delivery system, including medical, behavioral health, and social services;
 4. Improve health literacy, including nutrition education and tobacco use prevention and control;
 5. Expand health and wellness programs and develop incentives for participation in these programs;
- And
6. Expand chronic and complex care management models.

Potential Project Elements

- 1) Implement an evidence-based, multidisciplinary group HF Program, across communities
- 2) Utilize teaching materials and multidisciplinary education and support that have been validated as creating positive outcomes
- 3) Develop a train-the-trainer program that communities can utilize for sustainability
- 4) Create a menu of technology based (Interactive television, web based) support modules for trainers and patients that reinforce the training.
- 5) Develop a sustainable community action plan with measurable outcomes

Category 1 Measures

Measure	Metric	Data Source
Identification of community partners and the classification of those partners' communities (urban, suburban and rural). Target populations will be determined by hospital discharge information.	<p>Number of potentially participating:</p> <ul style="list-style-type: none"> • Hospitals • Clinics • Health education programs • Local Health Departments • Community-based support groups • Cardiovascular disease advocacy groups 	Reports from hospital
Utilization of Website/ITV	<ul style="list-style-type: none"> • Development of website or website programs for online reinforcement of training • Development of updates and refreshers for interactive television (ITV) 	Reports from hospital

Category 2 Measures

Measure	Metric	Data Source
Develop 'train-the-trainer' modules, utilizing existing,	<ul style="list-style-type: none"> • Number of participating organizations 	Reports from hospital

validated teaching tools which follow the AHA/ACC ¹³ national clinical guidelines for the national hospital to home (H2H) transition.	<ul style="list-style-type: none"> Number of trainers prepared 	
Identify mechanisms by which to contact and disseminate information about the Self-Management And Care (SMAC) program to patients, families, and potential providers	<ul style="list-style-type: none"> Number of patients participating in SMAC/resilience training program and receiving self-management tools 	Reports from hospital
Provision of ‘tools’ to assist patients in their HF self-management including a diary (to record and track symptoms, weight, salt intake and mood), a daily pill organizer box, and a low sodium food reference. They will also receive a resilience manual with workbook.	<ul style="list-style-type: none"> Number of patients who transition to community programming, aligned with SMAC 	Reports from hospital
Category 3 Measures		
Measure	Metric	Data Source
Decreased Hospitalizations	Number of hospitalizations for SMAC participants	Reports from hospital
Functional Health Status	Survey responses indicating functional health status	Research Electronic Data Capture (RedCap) a secure, web-based application designed exclusively to support data capture
Smoking cessation or reduction	# and % of SMAC participants who smoke and are referred to a smoking cessation program	Reports from Hospital
Hypertension monitoring	Increased Monitoring of blood pressure following SMAC training	RedCap
Quality of Life (QOL)	Survey responses indicating self-reporting of QOL	RedCap
Readmissions	Readmission rate for SMAC participants	Reports from hospital or KDHE data
Category 4 Measures		
Measure	Metric	Data Source
Impact of program on QOL	6-month QOL self-report	RedCap
Impact of program on anxiety and depression	6-month self-report	RedCap

¹³ American Heart Association/American College of Cardiology

Impact of program on hospital admissions	Number of hospital admissions	Reports from hospital
Smoking cessation or reduction	# smokers who complete SMAC training who have quit smoking or have cut back on their average daily number of cigarettes	RedCap
Reduced hypertension	Lower blood pressure in those who completed SMAC training and report implementation	Reports from Hospital
Impact of program on participating families/caregivers' QOL	Report from healthcare provider regarding observed compliance, observed anxiety/depression of patient and functioning of key supporters	6-month self-report and/or 6-month report from providers

Project 4: HeartSafe Community

Background

According to the July 2010 Report “The Burden of Coronary Heart Disease and Stroke in Kansas”, by the Kansas Department of Health and Environment, Cardiovascular disease (CVD), including heart disease and stroke, is the leading cause of death in the United States and in Kansas. In 2008, cardiovascular diseases accounted for 7,979 deaths in Kansas, 32% of all deaths. More than half (56.8%) of all Coronary Heart Disease (CHD) deaths occurred prior to reaching a hospital, clinic or medical center. Interestingly, approximately 1/3 of all CHD deaths are due to a heart attack or acute myocardial infarction (AMI). Unfortunately, only 12% of adults were correctly able to recognize all signs and symptoms of a heart attack and appropriately activate the 911 emergency systems.

Although CHD mortality continues to decrease, it continues to be a leading cause of death and a significant burden of the healthcare system in Kansas. Through the implementation of HeartSafe Communities, each community takes responsibility for the people and progress related to CHD. This is a sustainable model that arms the citizens with the appropriate knowledge and skills to actively participate in decreasing death and disability related to heart disease. Collaborative efforts are the most efficient and effective model to create a community wide system to positively impact the survivability of out-of-hospital cardiac arrest victims. Through a collaborative approach we can change our outcomes.

It is understood that many organizations have tried to establish sustainable projects related to heart disease, and there is particular difficulty with the sustainability piece. In addition, the cost of Automated External Defibrillators (AEDs) can be a significant barrier for communities, depending on their size and willingness to engage in and commit to such a project. Any hospital undertaking this HeartSafe project would need to confront these issues – sustainability and cost – immediately at the outset of the project and throughout work with community partners.

Project Goal

The goal of this project is to create Learning Collaborative Arenas (LCAs) that will improve and
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increase adherence to national guidelines along the continuum of care that promote the American Heart Association's development of HeartSafe Communities and ultimately decrease morbidity and mortality from coronary heart disease (CHD). Through cooperative community-based efforts, based on learning and engagement, death and disability related to CHD will be prevented. The model is evidence-based with outcomes contributing to the health and productivity of individuals, communities, and the State. Two secondary goals of the project would be to develop innovative ways for communities to make these HeartSafe efforts sustainable and also to find practical, perhaps creative ways to overcome cost barriers.

Project Focus Areas

- 5. Expand health and wellness programs and develop incentives for participation in these programs;
- And
- 6. Expand Chronic and Complex Care Management Models.

Potential Project Elements

- 1) Increase knowledge of signs and symptoms of heart attack
- 2) Increase knowledge of importance and need for early activation of 911 system
- 3) Provide education to community members regarding the early warning signs and symptoms of heart attack
- 4) Provide education to community members regarding the importance of calling 911 early
- 5) Provide Cardiopulmonary Resuscitation (CPR) with AED training
- 6) Ensure AEDs are strategically placed throughout the community
- 7) Develop a sustainable community action plan

Category 1 Measures

Measure	Metric	Data Source
Identify at-risk region(s)	<ul style="list-style-type: none"> • Out of hospital cardiac arrests • CHD survival 	Emergency Medical Services (EMS) Data and Hospital data
Identify one or more community partners in each entity.	<ul style="list-style-type: none"> • Hospital • Clinics • Physicians • EMS • Fire Department • Local Health Departments • First responders • Unified government • Employers • Neighborhoods 	Reports from hospital
Identify community based LCAs	Number of LCAs within Rural Health Network regions	Reports from hospital
Website infrastructure	Development of SharePoint site	Reports from hospital
Category 2 Measures		
Measure	Metric	Data Source
Emergency response assessment	<ul style="list-style-type: none"> • Availability of and access to 911 resources 	Police Data, EMS data, and

	<ul style="list-style-type: none"> EMS response (volunteer, staffing, response times) Community knowledge of HeartSafe initiatives, AED placement, bystander CPR (for example, number of certified coaches, in schools and community recreation leagues) 	External assessment
AED availability, utility and placement assessment	<ul style="list-style-type: none"> Assessment of numbers, location, standardization Community knowledge of use Provide list of AED locations to emergency service providers and agencies to distribute regionally 	External assessment RedCap or Survey Monkey data Reports from Hospital
Development of “train the trainer” materials for 1) Recognition of CHD risks and appropriate referrals 2) Hands only CPR 3) Early activation of 911 system 4) Use of AEDs	<ul style="list-style-type: none"> Number of contacts Materials distributed 	Reports from hospital
Category 3 Measures		
Measure	Metric	Data Source
Disbursement of train the trainer materials	<ul style="list-style-type: none"> Number of citizens who know how to perform bystander Hands-Only CPR 	Reports from hospital
Collaterals	<ul style="list-style-type: none"> Number of instructors who can teach CPR in participating communities 	Reports from hospital; AHA data
Training event participation	<ul style="list-style-type: none"> Delegation of instruction of hands only CPR to qualified volunteers in target organizations 	Reports from hospital
Category 4 Measures		
Measure	Metric	Data Source
Region(s)-specific morbidity and mortality related to CHD	<ul style="list-style-type: none"> Out of hospital cardiac arrest Survival rates 	Hospital admissions and discharge data; EMS Data
AED awareness	<ul style="list-style-type: none"> Increased Public awareness of AED location and immediate notification of locations where CPR is needed 	RedCap or Survey Monkey
Community participation	<ul style="list-style-type: none"> Number of citizens who know how to perform bystander Hands-Only CPR 	Reports from hospital

Project 5: Improving Coordinated Care for Medically Complex Patients

Background:

The federal Maternal and Child Health Bureau (MCHB) of the Health Resources and Services Administration (HRSA) defines children and youth with special health care needs (CYSHCN) as those who have, or are at increased risk for, chronic physical, developmental, behavioral, or emotional conditions and who require health and related services of a type or amount beyond that required by children in general.

Feudtner et al constructed a scheme of chronic complex conditions (CCC) based on the definition of any medical condition that can be reasonably expected to last at least 12 months and involve either different organ systems or one organ system severely enough that subspecialty care would be warranted.(Feudtner et al., 2001)¹⁴ This list was used to construct nine different large CCC categories.

Hospitalization rates for children with more than one CCC category are increasing, from 83/100,000 in the early 1990s to 166/1000 to the mid-2000s. Patients with cerebral palsy and more than one CCC and bronchopulmonary dysplasia and more than one CCC both increased significantly over this time period. This growth is putting a strain on Kansas families and its healthcare systems. The proportion of inpatient pediatric admissions and hospital days charges increased from 1997 - 2006 for every CCC group except hematology. As the number of CCCs increased, so did the increase in number of admissions, charges, and inpatient days. (Burns et al., 2010¹⁵; Simon et al., 2010¹⁶)

In response to *Healthy People 2010*¹⁷, the national health care agenda for the United States, the federal MCHB has identified six key outcomes for CYSHCN and their families. These six outcomes are:

1. Families of CYSHCN will participate in decision making at all levels and will be satisfied with the services they receive.
2. CYSHCN will receive ongoing, comprehensive care within a Medical Home.
3. CYSHCN will have adequate private and/or public insurance to pay for the services they need.
4. Children will be screened early and continuously for special health care needs.
5. Services for CYSHCN and their families will be organized in ways that families can use them easily.
6. Youth with special health care needs will receive the services necessary to make appropriate transitions to all aspects of adult life, including adult health care, work, and independence.

¹⁴ Feudtner, C., Hays, R.M., Haynes, G., Geyer, J.R., Neff, J.M. and T.D. Koepsell. Deaths Attributed to Pediatric Complex Chronic Conditions: National Trends and Implications for Supportive Care Services. (2001). *Pediatrics*: 107: 6.

¹⁵ Burns, K.H., Casey, P.H., Lyle, R.E., Bird, T.M., Fussell, J.J. and J.M. Robbins. (2010). Increasing Prevalence of Medically Complex Children in US Hospitals. *Pediatrics*: 126 (4).

¹⁶ Simon, T.D., Berry, J., Feudtner, C., Stone, B.L., Sheng, X., Bratton, S.L., Dean, J.M. and R. Srivastava. (2010). *Pediatrics*: 126 (4).

¹⁷ Healthy People 2010 (<http://www.healthypeople.gov/2010/redirect.aspx?url=/2010/>)

There are data to suggest that a systematic approach to providing health care for this group of patients as described above can improve care and lower cost.

Evidence based benefits of a medical home for CYSHCN include the following: (Homer et al., 2008)¹⁸

- Efficiency: Decreased time in the intensive care unit, fewer unnecessary emergency department visits
- Effectiveness: Improved process of asthma care and asthma care treatment, fewer illnesses and symptoms associated with chronic illness, decreased school days missed
- Family centeredness: Written management plan for child's condition, increased satisfaction with care, education on medication use
- Timeliness: Ease in filling prescriptions, phone calls returned on a timely basis
- Safety: Decreased medication errors

There are pockets of family-centered, coordinated care within Kansas for different groups of patients, such as those with cancer or end-stage renal disease. However, there is not a coordinated system/program that effectively collaborates between primary (medical home) and subspecialty(medical neighborhood) health care professionals on an inpatient and outpatient basis and with integration into community resources for many CYSHCN populations. Attainment of the above outcomes is very challenging as a result.

Project Goal
Develop an outpatient CYSHCN primary care center that will provide regional comprehensive care coordination for medically complex children.
Project Focus Areas
<ol style="list-style-type: none">1. Increase access to services, including primary care and preventive services;2. Increase the effective and efficient use of population health management through health information technology (HIT);3. Increase integration of the health care delivery system, including medical, behavioral health, and social services; and6. Expand chronic and complex care management models
Potential Project Elements
<ol style="list-style-type: none">1. Develop a primary care medical home for CYSHCN (specific criteria based on # of systems/specialists involved and technology dependence), that will deliver all services such as preventive care, well-child exams, immunizations and acute ill visits.2. Establish a medical consultative service for CYSHCN who receive primary care services outside of the CYSHCN center (primarily due to distance) with the goal of supporting regional primary care providers to manage the patient remotely with intermittent comprehensive visits.3. Integration and collaboration with the already established pockets of family centered care for CYSHCN, providing comprehensive primary care services, transition planning and coordinated care for CYSHCN.4. Collaboration with surgical and subspecialty multidisciplinary clinics for the children following in the CYSHCN primary care center.

¹⁸ Homer, C.J., Klatka, K., Romm, D., Kuhlthau, K., Bloom, S., Newacheck, P., Van Cleave, J. and J.M. Perrin. (2008). A Review of the Evidence for the Medical Home for Children with Special Health Care Needs. *Pediatrics*: 122 (4).

5. Collaboration with the inpatient medicine and/or intensive care services to develop an inpatient model of care which could potentially include care conferences, consultative services, direct patient care and/or transition planning, specifically for the children following in the CYSHCN primary care center.
6. The program would provide 24/7 phone access for patients following in the CYSHCN primary care center to speak directly with an advanced practice registered nurse (APRN) or physician dedicated to the program.
7. Leverage technology including the potential use of web consultations, telemedicine, patient portals, and the use of smart phones and other tools for remote consultations and monitoring to improve care coordination and minimize prolonged travel time and expense.
8. Avoid unnecessary emergency department/urgent care clinic (ED/UCC) visits and inpatient hospitalizations to decrease costs and improve quality of life. Improved care coordination to decrease length of stay for necessary admissions.
9. Enhanced scheduling to coordinate appointments with subspecialists to decrease the number of unnecessary outpatient appointments, maximize number of appointments in one day and improve attendance rates.
10. Develop, track, and trend outcome measures to assess the impact of the program including patient experience, registries, immunization rates, ED/UCC visits, clinically important conditions as identified via the medical home model, and inpatient hospitalizations.
11. Provide the opportunity for research of this patient population to enhance future care.

Category 1 Measures

Measure	Metric	Data Source
Develop an outpatient CYSHCN primary care center that will provide a comprehensive care coordination program	Develop a multidisciplinary framework for and successfully implement a comprehensive care coordination program for CYSHCN	Internal Strategic Business Proposal
Create reporting mechanisms in order to share information regarding the CYSHCN's outpatient clinic appointments with subspecialists and families, in a timely way, and extend this to PCPs who utilize the center in a consultative manner	Submission of sample reports delivered to internal and community PCPs	Outpatient CYSHCN Clinic reports
Develop job requirements and/or competencies for the staff of the outpatient CYSHCN primary care clinic	Submission of job descriptions and budget staffing assessment	Internal Job Descriptions
Develop electronic documentation templates and order sets to support the evidence based care of and the reporting on the patients served by this clinic	Completion of electronic documentation templates and order sets	Internal EMR

Category 2 Measures

Measure	Metric	Data Source
Change phone triage system from traditional RN call triage to physician or APRN system	100% of calls answered by a physician or APRN	Phone notes from EMR Patient Survey
Program communication and collaboration processes in place for medical neighborhoods	Develop plans with subspecialty clinics about co-management strategies 90% of patients have care plans in place	Documented plans for each section's collaboration with the CYSHCN service in place and available on hospital website EMR
CYSHCN primary care clinic's outpatient component recognized as a NCQA Patient-Centered Medical Home	NCQA status achieved	NCQA certification paperwork
Completed EMR records for CYSHCN primary care clinic patients	90% of enrolled patients with care plans (updated within the past year) and complete medication lists (each encounter) and problem lists in EMR (each encounter)	EMR

Category 3 Measures

Measure	Metric	Data Source
Healthcare acquired conditions	Pressure Ulcers decreased	Business objects report from EMR
Patient / Family Experience	“During your child’s most recent visit, did your provider give you easy to understand information about the health concerns you raised?” Yes 90% of time	Patient Experience Survey
Patient / Family Experience Coordination of Care	“If your provider ordered labs/x-rays, or other studies, did someone call to follow up the results in a timely manner” Yes 90% of the time	Patient Experience Survey
Care transitions	<ul style="list-style-type: none"> • % of hospitalized CYSHCN who have a clinical, telephonic, or face-to-face follow-up interaction with care team within 2 days of discharge • % of CYSHCN seen in ED who have clinical, 	EMR EMR

	telephonic, or face-to-face follow-up interaction with the care team within 2 days of ED visit	
Decreased Patient / Family Travel Experience	Review 10% of patients in program and calculate total travel time- report decrease/increase from baseline	Business objects report from EMR
Regional Outreach	Increase number of patients receiving intermittent in person/remote comprehensive visits with primary care physician (PCP) outside of CYSHCN center	Billing/PHIS Databases Business objects report from EMR
Category 4 Measures		
Measure	Metric	Data Source
Patient / Family Experience	"Would you recommend this provider/office to your family and friends" Yes 90% of the time	Patient Experience Survey
Patient electronic access	Greater than 50% CYSHCN have electronic access to their PHI	Business objects report from EMR
Appointment consolidation	Two or more appointments for health care scheduled for the same day greater than 25% of the time	Business objects report from EMR
Appointment utilization	Decrease non-attendance rate from baseline	Business objects report from EMR
ED / UCC utilization	Decrease number of emergency department/Urgent care visits for CYSHCN	Billing/PHIS Databases Business objects report from EMR
Inpatient care and length of stay	Decrease number of and LOS for Hospitalizations for CYSHCN	Billing/PHIS Databases Business objects report from EMR

Project 6: Statewide Expansion of Sepsis Early-Warning and Escalation Process

Background

Sepsis is the body's response to any kind of infection: bacterial, viral, parasitic, or fungal. Anyone with an infection may be at risk for developing sepsis, but certain factors may increase this risk. The very old, the very young, hospitalized patients, and people with certain chronic medical conditions (such as pneumonia, trauma, surgery, burns, cancer and AIDS) may be at greater risk. The onset of sepsis symptoms are often nonspecific (such as fever, rapid heart rate, increased respiratory rate, lethargy, confusion) making it difficult to recognize and treat properly. Healthcare providers are in a unique position to identify patients with the earliest signs of sepsis and to prevent the spread of severe infection. Early recognition allows for appropriate

treatment to begin sooner, decreasing the likelihood of septic shock and the associated cascade of life-threatening organ failure.

Sepsis affects more than 10,000 Kansans each year, and the sepsis-related mortality rate is 30%-50% in most Kansas hospitals – which exceeds the mortality rate associated with acute myocardial infarction¹⁹. Mortality rates across the nation can exceed 60%-80% when four or more organs are affected. In the U.S. there are approximately 750,000 new sepsis cases each year, with at least 210,000 fatalities and this is reported to be same throughout Europe²⁰. As medicine becomes more advanced, with invasive procedures and immunosuppression, the incidence of sepsis is likely to increase even more.

The University of Kansas Hospital has been a leader in implementing systems for early identification of sepsis across the system and has seen a significant reduction in sepsis mortality. Working with its teaching partner, The University of Kansas Medical Center, the organization has also reached out through the Kansas Critical Care Collaborative to identify partners across the state to implement sepsis early warning systems and early goal directed therapy known to minimize the impact of sepsis.

While progress has been made, there is more to do. Research has proven that early detection of sepsis is critical. In addition, for each stage along the sepsis continuum, there are standards of care (goal directed therapy) which have proven successful. This includes quickly getting blood cultures when sepsis is suspected, providing early treatment with appropriate antibiotics and normalizing lactate levels. If this goal directed therapy is implemented in a timely manner, better patient outcomes and a reduction in utilization of the healthcare system results²¹.

To date, very little outreach has taken place to retirement homes, skilled nursing facilities and other long-term care facilities across the state to educate staff on the early signs/symptoms of sepsis and the steps which can be taken to implement early goal directed therapy. Similarly, there has been no education to the general public regarding early warning signs related to sepsis and steps to take to prevent a patient from progressing through the sepsis continuum to septic shock. Often, patients and families wait until they are further down the sepsis continuum to seek help and statistics show a 7% increase in mortality for each hour in delay of treatment. Intervention in these two areas could reduce the incidence of severe sepsis and septic shock, reducing utilization of the healthcare system and premature deaths related to sepsis²².

Project Goals
The goal of this initiative is to expand the work already done in an inpatient setting around early identification and treatment of sepsis to the general public and long-term/extended care facilities. To this end, Learning Collaborative Arenas (LCAs) will be utilized to engage patients and providers along the continuum of care.
Project Focus Areas
6. Expand chronic and complex care management models

¹⁹ Kansas Sepsis Project Website: <https://coa.kumc.edu/kansassepsis/>

²⁰ NIH Sepsis Fact Sheet: http://www.nigms.nih.gov/Education/factsheet_sepsis.htm

²¹ "Surviving Sepsis Campaign: International Guidelines for Management of Severe Sepsis and Septic Shock: 2012." 3rd ed. *Critical Care Medicine and Intensive Care Medicine* (Feb 2013).

²² Sepsis in the 21st century: recent definitions and therapeutic advances; American Journal of Emergency Medicine (2007) 25, 564–571

Potential Project Elements

- 1) Develop a network of long-term/extended care facilities across the state willing to partner in an initiative to increase early identification of sepsis in the facilities' patient populations. The goal would be to start with a select group of facilities geographically located across the state and committed to this work to determine what works best within their settings. Further expansion could then take place based upon the practices that worked in the initial group of facilities.
 - a. Create and deliver easy to use, educational materials for use in these settings.
 - b. Create algorithms for use in these settings for implementing early goal directed therapy for patients identified as potentially septic.
- 2) Develop statewide informational programs to reach the general public on the signs and symptoms of sepsis, the seriousness of sepsis as it progresses from early stages to severe sepsis, and steps which can be taken when sepsis is suspected.
- 3) Develop partnerships with departments of public health, areas on aging and/or other community agencies to foster community engagement, to educate community members regarding tools for early identification of sepsis and steps to be taken when sepsis is suspected.
- 4) Develop a statewide implementation plan based on the learnings from the initial partnerships.

Category 1 Measures

Measure	Metric	Data Source
Identify community-based LCAs	<ul style="list-style-type: none"> • Number of LCAs within Rural Health Network regions 	<ul style="list-style-type: none"> • Reports from hospital
Identify community partners	<ul style="list-style-type: none"> • Nursing Homes • Long-Term Care Facilities • Rehabilitation Units • Community Health Departments 	<ul style="list-style-type: none"> • Reports from hospital
Database development	<ul style="list-style-type: none"> • Participation in database relative to sepsis identification 	<ul style="list-style-type: none"> • Research Electronic Data Capture (RedCap) a secure, web-based application designed exclusively to support data capture
Baseline Awareness Survey	<ul style="list-style-type: none"> • Survey staff in participating facilities as to their knowledge of the early signs and symptoms of sepsis and proper escalation of care processes 	<ul style="list-style-type: none"> • RedCap or Survey Monkey

Category 2 Measures

Measure	Metric	Data Source
LCA engagement	<ul style="list-style-type: none"> • Submission of monthly sepsis data • Participation in scheduled quarterly mentoring conference calls with 	<ul style="list-style-type: none"> • RedCap Conference attendance roster

	Sepsis leadership	
Educational curriculum development	<ul style="list-style-type: none"> Completion of professional web based modules Completion of toolkit Completion of training curricula Completion of public education resources Development of sepsis website 	<ul style="list-style-type: none"> Checklist for completion Pre and post education awareness assessments
Educational dissemination and impact	<ul style="list-style-type: none"> Number of hits to website Number of and attendance at catchment educational training forums Improvement in knowledge of and confidence in core elements of Sepsis identification 	<ul style="list-style-type: none"> Count web hits to the sepsis website Continuing Education (CE)/Area Health Education Center (AHEC) records of training dates, locations, and attendance rosters CE training evaluations
LCA implementation	<ul style="list-style-type: none"> Percentage of LCAs reporting use of sepsis identification tools in their workflows 	<ul style="list-style-type: none"> RedCap
Category 3 Measures		
Measure	Metric	Data Source
Improved identification of septic patients at any stage of the continuum	<ul style="list-style-type: none"> Number of patients identified as septic pre and post implementation at each participating facility # of sepsis patients diagnosed at early stages of sepsis # of sepsis patients diagnosed initially with severe sepsis # of sepsis patients diagnosed initially with septic shock 	Quarterly RedCap survey of participating facilities
Improved implementation of early goal directed therapy	<ul style="list-style-type: none"> Number of documented, appropriate interventions using goal directed therapy 	Quarterly RedCap survey of participating facilities
Reach of public education program	<ul style="list-style-type: none"> Number of public service announcements broadcast in selected markets 	Self-reporting from media outlets

Category 4 Measures		
Measure	Metric	Data Source
Escalation of patient care with the goal being to provide care at the most appropriate level. Early detection and treatment should result in less escalation of patients outside of their catchment areas to tertiary facilities.	<ul style="list-style-type: none"> Number of patients transferred to higher level of care from participating institutions 	RedCap
Proper utilization of health services utilization; as above, appropriate identification and escalation of sepsis at the earliest stages should facilitate treatment at less acute facilities resulting in lower costs, shorter lengths of stay and optimized outcomes.	<ul style="list-style-type: none"> Number of acute care hospital admission or Emergency Department visits associated with sepsis. Results would be segmented by facility type with a goal of providing care at the least acute facility possible. Number of deaths associated with sepsis 	KDHE databases

4. Common Project Milestones

The two hospitals participating in the DSRIP pool will develop plans to report on a core set of Category 4 population-focused improvements. The overall goals of the common Category 4 indicators are to promote healthy living, healthier communities, and improved access to services. The State has identified two priority areas as the focus of common Category 4 DSRIP metrics: Emergency department (ED) visits and readmissions within 30 days of hospital discharge. Specific measures are proposed in the table below targeting these population-focused improvements. The successful implementation of the proposed hospital-specific projects (see Section 3) that increase patient-centered, coordinated, and preventive care is also anticipated to also reduce hospital readmissions, reduce costs, and better focus ED resources to provide more timely care and use of resources to assist patients in need of immediate emergency care. Required measures to be reported by all hospitals are denoted with an asterisk (*) below. All participating hospitals must report on required common Category 4 metrics, and may choose up to two (2) additional common Category 4 metrics for reporting.

Emergency Department

Category 4 Population-Focused Measures		
Measure	Metric	Data Source
*Reduce overall ED utilization	<ul style="list-style-type: none"> # of ED visits % overall reduction in ED visits # of Frequent Users of ED (12 or more visits during a 12-month period) 	Hospital Database Claims Data

*Identify and analyze reasons for non-emergent ED visits	<ul style="list-style-type: none"> # of ED visits for services that could have been provided on non-emergency basis by a PCP Analyze non-emergent ED complaints/reasons for visits and identify patient populations that use ED for non-emergent health complaints Design a screening tool for non-emergent care to identify primary reasons (and barriers) for ED visits for non-emergent care 	Hospital Database Claims Data Hospital Database Claims Data Reports from Hospital
Reduce wait time	<ul style="list-style-type: none"> Door to diagnostic evaluation by qualified medical personnel 	
Reduce ED utilization for children age 18 or under with a primary diagnosis of asthma	<ul style="list-style-type: none"> # of ED visits for children age 18 or less with a primary diagnosis of asthma 	Hospital Database Claims Data
Primary Care Physician access and awareness	<ul style="list-style-type: none"> % of patients sampled that are unable to identify a Primary Care Physician 	Survey

Readmissions within 30 days of hospital discharge

Category 4 Measures: Population-Focused		
Measure	Metric	Data Source
*Decrease 30-day, all-cause readmission rate following hospitalization	<ul style="list-style-type: none"> # of patients readmitted to the index hospital following a hospitalization 	Claims data
Better understanding by patient of follow-up care	<ul style="list-style-type: none"> Patients who reported that YES they were given information about what to do during their recovery at home Teach Back Method used to educate patients about medications prior to discharge 	HCAHPS ²³ Questions 19 & 20 Hospital records
Follow-up appointments prior to discharge for patients identified as "high risk" for readmission	<ul style="list-style-type: none"> % of patients scheduled for a follow-up visit prior to discharge who have been identified as "high risk" for readmission 	EHR and/or discharge data

²³ Hospital Consumer Assessment of Healthcare Providers and Systems

5. Hospital DSRIP Plan Requirements

Hospital DSRIP Plans

Each participating hospital must submit an individual hospital DSRIP plan that identifies the projects, population-focused objectives, and specific metrics adopted from Section 3 and 4 of this planning protocol. DSRIP plans must meet all requirements pursuant to STC 69 (g).

Minimum Number of Projects

Hospitals shall select a minimum of two projects from the list of approved focus areas. Each project must include—over the lifetime of the project—goals, milestones, and metrics as specified.

Organization of Hospital DSRIP Plans

Hospital DSRIP plans shall include the following sections:

A. Executive Summary

The Executive Summary shall provide a summary of the hospital DSRIP plan, a summary of the hospital's vision of delivery system reform, and a table of the projects included in the plan, including project titles, brief descriptions of the projects, and goals.

B. Background Section

The background section shall include, at a minimum, a summary of the hospital's community context, a description of the hospital's patient population, a description of the health system, a description of challenges facing the hospital, and the goals and objectives of its DSRIP plan. The background section also shall include a brief description of any initiatives in which the hospital is participating that are funded by the U.S. Department of Health and Human Services and are directly related to any of the hospital's DSRIP projects.

C. Project Descriptions

1. Project Narrative

Pursuant to STC 69 (g) (ii), each hospital shall include a narrative for each project that describes the following elements of the project:

- **Goals**
This section should provide a description of the goal(s) of the project, which describes the specific challenges of the hospital system and the major delivery system solution identified to address those challenges by implementing the particular project. Analytics should be included to support these conclusions specific to the hospital.
- **Expected Results**
The expected results section should provide a description of the target goal over the demonstration approval period, metrics associated with the project and the significance of that goal to the hospital system and its patients.
- **Rationale**
The hospital DSRIP plan must include a narrative on the hospital's rationale for selecting the project, milestones, and metrics based on relevance to the hospital system's population and circumstances, community need, and hospital system priority and starting point with baseline data.
- **Relationship to Other Projects**

The plan must also include a narrative describing how this project supports, reinforces, enables and is related to but does not duplicate other projects and interventions within the hospital system.

2. Project Milestones and Performance Indicators Table

For each project, hospitals must submit milestones from Categories 1-4. The milestones and required performance indicators must be adopted in accordance with STC 69 (c) and (d).

The milestones and performance indicators table must meet the following requirements:

- Include milestones from Categories 1-4
- Report at least two milestones (one of which must be an outcome milestone) in each reporting cycle
- Category 1 milestones may be reported on in DY 2
- Include Category 2 milestones in DY 2 through 5
- Include Category 3 milestones in DY 3 through 5. An associated Category 3 milestone is required for each stated goal or objective of a project.
- Report Category 4 performance indicators every year

Category 3 measures must have baseline data initially submitted with hospital DSRIP plan.

The table below illustrates the reporting timeframe for each category of project milestones.

<i>Reporting Timeline</i>	<i>Category 1 milestones</i>	<i>Category 2 milestones</i>	<i>Category 3 milestones</i>	<i>Category 4 milestones</i>
Baseline Data (submit with initial plan)			X	
DY 2	X	X		X
DY 3		X	X	X
DY 4		X	X	X
DY 5		X	X	X

3. Funding Estimates

Each hospital DSRIP plan must include an estimate of the funding required to support DSRIP payments and allocation plan for DSRIP milestones.

6. Hospital Plan Review Process

Because final approval by CMS of the State's DSRIP Planning and Funding and Mechanics Protocols may not occur until July 31, 2013, and the State wants hospitals to have ample time to create their DSRIP Plans, hospitals may begin developing their DSRIP Plans prior to final CMS approval of the Protocols. Hospitals should be aware, however, that the protocols could be modified prior to final CMS approval. Hospital DSRIP Plans will only be finally approved by both KDHE and CMS.

Hospital DSRIP Plans are due to KDHE by 5:00PM (CDT) August 1, 2013. They must be sent via electronic mail to an e-mail address specified by the State.

KDHE members of the DSRIP Project Team will review the Plans, using the following criteria:

- The plan is in the format and contains all required elements outlined in the Kansas DSRIP Planning and Funding and Mechanics Protocols and is consistent with STC 69

- All projects clearly identify Category 1, 2 and 3 milestones, as described in STC 69 (c)(i-iii)
- All projects clearly identify the population-focused health improvement measures (Category 4) to be reported
- The amount and distribution of funding is in accordance with STC 69 (g)(iii), STC 70 and Section 8 of this combined protocols document
- The proposed projects are new or significantly enhance existing health care initiatives and do not duplicate other CMS and Department of Health and Human Services (HHS) funded initiatives in which the hospital participates
- The plan and all of the projects proposed are consistent with the overall goals of the DSRIP program

The ultimate decision on State approval will rest with Dr. Robert Moser, Secretary of KDHE and State Health Officer.

By August 30, 2013, KDHE will complete its initial review of each timely submitted Hospital DSRIP Plan and will respond to the hospital in writing with any questions or concerns identified. The hospital must respond in writing to any notification by KDHE of questions or concerns. The hospital's response must be received by KDHE within 3 business days of that notification. The hospital's initial response may consist of a request for additional time to address KDHE's comments; however, the hospital's revised plan must address all of KDHE's comments and must be received by KDHE by September 13, 2013.

By September 27, 2013, pending CMS approval of the Protocols, KDHE will take action on each timely submitted hospital-specific DSRIP plan, approving each plan that it deems satisfactory according to the criteria outlined in above. KDHE will then submit approved plans to CMS for final review and approval by September 30.

Following submission of the KDHE-approved Hospital DSRIP Plan, CMS staff will review the Hospital DSRIP plan. CMS will share any feedback and questions with the KDHE. KDHE will share CMS' concerns with the hospital and work with the facility to develop a response and amend the plan until it is acceptable to CMS.

For hospital plans submitted on or before August 31, 2013, if a hospital does not receive approval of its Hospital DSRIP Plan by December 31, 2013, the hospital may continue to work with KDHE and CMS to obtain approval by April 30, 2014. If the Hospital DSRIP Plan is approved by April 30, 2014, the hospital is eligible for Demonstration Year (DY) 2 through 5 payments. If the Hospital DSRIP Plan is not approvable on April 30, 2014, CMS will notify KDHE in writing and the hospital will be unable to participate in DSRIP. The total amount of DSRIP payments available shall be allocated 75 percent to LPTH and 25 percent BCCH.

DSRIP Allocation (All Funds)

	Funding Allocation	DY 2	DY 3	DY 4	DY 5	Total
LPTH	75%	7,500,000	15,000,000	22,500,000	29,892,413	74,892,413
BCCH	25%	2,500,000	5,000,000	7,500,000	9,964,138	24,964,138
	100%	10,000,000	20,000,000	30,000,000	39,856,550	99,856,550

7. CMS Review

The State will submit hospital DSRIP plans to CMS no later than September 30, 2013 to allow CMS two months to review them, with a target date for final approval by CMS of December 31, 2013.

8. Application for Funds

DSRIP payments for each participating hospital are contingent on:

- The hospital fully meeting project milestones defined in the approved hospital-specific Hospital DSRIP Plan; and
- Both KDHE and CMS certifying the hospital's achievement of a given milestone.

In order to receive incentive funding relating to any metric, the hospital must submit all required reporting, as outlined in the Section 10 of this document, and the result must be certified by both the state and CMS.

Hospitals will not receive credit for metrics achieved prior to CMS approval of their Hospital DSRIP Plans.

Hospital DSRIP Plans shall include estimated funding available by year to support DSRIP payments, and specific allocation of funding to DSRIP milestones proposed within the Hospital DSRIP Plan. Category 3 milestones must be of greater value than Category 2 milestones, which in turn must be of greater value than Category 1 milestones. Category 4 common performance indicators receive the lowest level of reimbursement compared to the other categories, and incentive payments must be identical for all Category 4 common performance indicators.

Payment of funds allocated in a Hospital DSRIP Plan to Category 4 will be contingent on the hospital completing the following activities:

- Reporting DSRIP Performance Indicators to the state and CMS, and;
- Meeting a target level of improvement in the DSRIP Performance Indicator relative to baseline.

At least some of the funds so allocated in DY 3 and DY 4, and all such funds allocated in DY 5, will be contingent on meeting a target level of improvement for the Category 4 specific performance indicators.

9. Required Reports and Templates

Hospitals must submit semi-annual and annual reports to the State using a reporting template specified by the State to document their progress (as measured by the specific metrics applicable to the projects that the hospitals have chosen). Submission of these reports is required to qualify to receive DSRIP Payments. Payment will only occur if the specified performance levels are achieved.

Each project must include, over the lifetime of the project, milestones from Categories 1 through 4 in STC 69(c), and the hospital must report at least two milestones (one of which must be an

outcome milestone) in each reporting cycle. Category 1 milestones may be reported on in DY 2. Each project must include Category 2 milestones in DY 2 through 5. Each project must include Category 3 milestones in DY 3 through 5 (note that Category 3 milestones may also be reported in DY 2). Category 4 Performance Indicators must be reported every year.

Section 5.C.2 of this document further outlines when each category of milestone must be reported.

10. Progress Review Process

Two times per year, DSRIP hospitals shall submit reports to the state and CMS. Semi-annual and annual reports must be submitted demonstrating progress on DSRIP projects. These reports will serve as the basis for authorizing incentive payments to each hospital for achievement of DSRIP metrics. Category specific metrics achieved during each reporting period will be measured. The reports shall be submitted using the standardized reporting forms approved by KDHE-DHCF and CMS. The Hospitals are required to report at least two milestones in each reporting cycle. The following shall be included in the reports:

- Data on progress made for all Demonstration year metrics
- Narrative description of the project completion progress, lessons learned, challenges faced and other pertinent findings
- Copy or list of all data sources and supporting documentation as identified per metric in the hospital's approved DSRIP plans to demonstrate achievement of each metric for which the hospital is seeking payment

The state and CMS must certify that a hospital has met its approved metrics as a condition for the release of associated DSRIP funds to the hospital. A hospital may only receive DSRIP payments following the successful achievement of metrics as reflected in its reports and as approved by both the state and CMS. If either the state or CMS determines the hospital did not fully and successfully achieve a metric, payment to the hospital for that metric will not be issued. DSRIP hospitals will have all supporting documentation available for review by the state and CMS, if requested.

The timeline for the hospital reporting process, the state and CMS review process, and the state payment process will be as follows:

	Report Period Begin Date	Report Period End Date	Hospital Report Period Due Date	State Report Review Due Date	CMS Report Review Due Date	Payment Due Date
DY 2 Semi-Annual	1/1/2014	6/30/2014	7/30/2014	8/31/2014	9/30/2014	10/31/2014 *
DY 2 Annual	1/1/2014	12/31/2014	1/31/2015	2/28/2015	3/30/2015	4/30/2015
DY 3 Semi-Annual	1/1/2015	6/30/2015	7/30/2015	8/31/2015	9/30/2015	10/31/2015 *
DY 3 Annual	1/1/2015	12/31/2015	1/31/2016	2/28/2016	3/30/2016	4/30/2016
DY 4 Semi-Annual	1/1/2016	6/30/2016	7/30/2016	8/31/2016	9/30/2016	10/31/2016 *

DY 4 Annual	1/1/2016	12/31/2016	1/31/2017	2/28/2017	3/30/2017	4/30/2017
DY 5 Semi-Annual	1/1/2017	6/30/2017	7/30/2017	8/31/2017	9/30/2017	10/31/2017 *
DY 5 Annual	1/1/2017	12/31/2017	1/31/2018	2/28/2018	3/30/2018	4/30/2018
* Payment crosses state fiscal year, encumbrance required						

11. Penalties

If either the state or CMS determines that a hospital has failed to meet its approved metric, no incentive payment will be made. A hospital's failure to fully meet a performance metric under its Hospital DSRIP Plan within the time frame specified will result in forfeiture of the entire associated incentive payment. There will be no payment for partial fulfillment of a performance metric.

12. Incentive Payment Formula

Allocation of DSRIP plan funding by Project Category is outlined in STC 69 (g)(4)(iii). Category 3 milestones must be of greater value than Category 2 milestones. Category 1 milestones must be less than Category 2 milestones. Category 4 milestones must consist of common performance indicators and shall consist of the least value when compared to the other Categories. Payments for Category 4 milestones must be identical for all performance indicators. Hospital DSRIP Plans must include, over the lifetime of the project, milestones from Categories 1 through 4. Hospitals are required to report at least two milestones in each reporting cycle.

Hospital DSRIP Plans shall include estimated funding available by DY to support DSRIP payments. Allocation of funding to DSRIP Plans by specific Project Category shall be proposed within the Hospital Plans as outlined below.

Demonstration Year 2 Funding Allocation Formula

In DY 2, \$10 million dollars of total DSRIP funding is available. In this DY, \$7.5 million dollars is available to the LPTH and \$2.5 million dollars is available to the BCCH.

<i>DSRIP Hospital</i>	<i>Total DY Funding</i>
LPTH	7,500,000
BCCH	2,500,000
Total	10,000,000

The table below specifies the base value for all Project Categories in DY 2:

DSRIP Project Category Funding Distribution - DY 2

Funding Allocation Ranking

Project Category 1	2
Project Category 2	1

Project Category 3	Not Applicable
Project Category 4	3

Demonstration Year 3 Funding Allocation Formula

In DY 3, \$20 million dollars of total DSRIP funding is available. In this DY, \$15 million dollars is available to the LPTH and \$5 million dollars is available to the BCCH.

<i>DSRIP Hospital</i>	<i>Total DY Funding</i>
LPTH	15,000,000
BCCH	5,000,000
Total	20,000,000

The table below specifies the base value for all Project Categories in DY 3:

DSRIP Project Category Funding Distribution - DY 3

<i>Funding Allocation Ranking</i>	
Project Category 1	Not Applicable
Project Category 2	2
Project Category 3	1
Project Category 4	3

Demonstration Year 4 Funding Allocation Formula

In DY 4, \$30 million dollars of total DSRIP funding is available. In this DY, \$22.5 million dollars is available to the LPTH and \$7.5 million dollars is available to the BCCH.

<i>DSRIP Hospital</i>	<i>Total DY Funding</i>
LPTH	22,500,000
BCCH	7,500,000
Total	30,000,000

The table below specifies the base value for all Project Categories in DY 4:

DSRIP Project Category Funding Distribution - DY 4

<i>Funding Allocation Ranking</i>	
Project Category 1	Not Applicable
Project Category 2	2
Project Category 3	1
Project Category 4	3

Demonstration Year 5 Funding Allocation Formula

In DY 5, \$39,856,550 of total DSRIP funding is available. In this DY, \$29,892,413 is available to the LPTH and \$9,964,138 is available to the BCCH.

<i>DSRIP Hospital</i>	<i>Total DY Funding</i>
LPTH	29,892,413
BCCH	9,964,138
Total	39,856,550

The table below specifies the base value for all Project Categories in DY 4:

DSRIP Project Category Funding Distribution - DY 5

Funding Allocation Ranking

Project Category 1	Not Applicable
Project Category 2	2
Project Category 3	1
Project Category 4	3

13. DSRIP Plan Modifications

The State recognizes there may be valid reasons for hospitals to prospectively modify their DSRIP Plans. Reasons to approve a plan modification request that will be considered are:

- Learning and knowledge acquired from project experience or external sources, or both, indicate that revising or reorienting project components or metrics would improve or enhance the project
- Information that was believed to be available to achieve a metric or measure is unavailable or unusable, requiring a modification to the hospital plan to revise or replace the metric or measure
- A hospital identifies superior information to demonstrate achievement of a metric and requests a modification to incorporate that data source
- External issues occur outside of the hospital's control that require the hospital to modify or replace a metric, measure, or component of a project
- New federal or state policies are implemented that impact a DSRIP project and a hospital seeks to update the affected project to reflect the new environment
- Other acceptable reasons, subject to review and approval by KDHE and CMS, that are reasonable and support the goals of the DSRIP program

Hospitals may request plan modifications at any time during the Demonstration period. KDHE shall take action on the plan modification request and submit recommended requests to CMS for approval within 15 days of receiving a modification request. CMS shall take action on the plan modification request within 30 days of receipt from KDHE.

CMS may require that a plan be modified if it becomes evident that the previous targeting or estimation is no longer appropriate or that targets were greatly exceeded or underachieved.

This process does not allow modification for failure to comply with the STCs 69 and 70 or the requirements contained in this document.

14. Rapid Cycle Evaluation

The DSRIP program will support a process of data-driven, rapid cycle improvement that will gather data in real time and make recommendations to the State, CMS and hospitals about how to ensure timely progress in promoting the overall goals of the DSRIP program. As previously noted, these goals are: healthy living; healthy communities; and access to services. Each Hospital DSRIP Plan will address their process for continuous performance improvement in order to improve efficiencies, quality and experience while reducing or eliminating inefficiencies, waste and redundancies. Upon completion and approval of the Hospital Plans, the State and the external evaluator will further develop the process for rapid cycle evaluation for the DSRIP program overall.

An example of a process framework for continuous performance improvement, or rapid cycle improvement, is the “Model for Improvement,” developed by the Associates in Process Improvement²⁴ and used by the Institute for Healthcare Improvement (IHI). This model has two parts:

- Three fundamental questions, which can be addressed in any order.
 - What are we trying to accomplish?
 - How will we know that a change is an improvement?
 - What changes can we make that will result in improvement?
- The Plan-Do-Study-Act (PDSA) cycle²⁵ tests changes in real work settings, by planning it, trying it, observing the results, and acting on what is learned.
- After testing the change, learning from each test, and refining the change through PDSA cycles, the change would be implemented on a broader scale, or at a minimum the findings would be disseminated to allow other providers to learn from DSRIP.

The semi-annual and annual hospital report requirements will also include instruction for the hospitals to provide descriptions of rapid cycle evaluations that occurred during the previous six month timeframe and any planned evaluations or changes during the upcoming timeframe. While the hospitals must submit semi-annual and annual reports to the State, more frequent evaluation will occur by the hospitals, State and the external evaluator. DSRIP meetings will occur, at least on a quarterly basis, with the hospitals, State, and external evaluator. During these meetings, rapid cycle evaluation and improvement will be discussed relevant to the various hospital processes and interim data points. These discussions will facilitate identification of potential issues that could interfere with the success of DSRIP improvement projects and plans, and assure changes are in place to help the hospitals successfully reach the outcome measures/milestones of each plan.

15. Independent Evaluation of DSRIP Program and Projects

²⁴ Langley GL, Nolan KM, Nolan TW, Norman CL, Provost LP. *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance* (2nd edition). San Francisco: Jossey-Bass Publishers; 2009

²⁵ The Plan-Do-Study-Act (PDSA) cycle was originally developed by Walter A. Shewhart as the Plan-Do-Check-Act (PDCA) cycle. W. Edwards Deming modified Shewhart's cycle to PDSA, replacing "Check" with "Study." [See Deming WE. *The New Economics for Industry, Government, and Education*. Cambridge, MA: The MIT Press; 2000.]

The DSRIP evaluation will include review of process and outcome measures related to milestones identified in Categories 1 through 4. Quantitative and qualitative data sources will be used in calculation of the process and outcome measures. The DSRIP evaluation plan (see table below) will be more fully designed once specific DSRIP project documents are further developed. The Kansas Foundation for Medical Care, Inc has been contracted with as the external evaluator, in accordance with STC 69 (e) vi.

DSRIP Goals/Focus Areas	Evaluation Question	Performance Measure /Indicator	Data Source	Data Frequency	Deliverable
<p>Goals: Healthy living; Healthy communities; Access to services.</p> <p>Focus Areas:</p> <ul style="list-style-type: none"> • Increase access to services, including primary care and preventive services • Increase the effective and efficient use of population health management through health information technology (HIT) • Increase integration of the health care delivery system, including medical, behavioral health, and social services. • Improve health literacy, including nutrition education and tobacco use prevention and control • Expand health and wellness programs and develop incentives for participation in these programs • Expand chronic and complex care management models 	Were the participating hospitals able to show statistically significant improvements on measures within Categories 1 through 3 related to the goals of the three part aim: better care for individuals (including access to care, quality of care, and health outcomes), better health for the population, and lower cost through improvement?	Measures to be determined by metrics included in the specific Hospital DSRIP Plans	Hospital reports	To Be Determined	Semi-annual and annual
<p>Goals: Healthy living; Healthy communities</p> <p>Focus Areas:</p> <ul style="list-style-type: none"> • Increase integration of the health care delivery 	Were the participating hospitals able to show improvements on measures within Category 4 related to the goals of the three part aim?	Measures to be determined by metrics included in the specific Hospital DSRIP Plans	Hospital reports	To Be Determined	Semi-annual and annual

<p>system, including medical, behavioral health, and social services.</p> <ul style="list-style-type: none"> • Improve health literacy, including nutrition education and tobacco use prevention and control • Expand health and wellness programs and develop incentives for participation in these programs • Expand chronic and complex care management models 					
<p>Goals: Healthy living; Healthy communities</p> <p>Focus Areas</p> <ul style="list-style-type: none"> • Increase access to services, including primary care and preventive services • Increase the effective and efficient use of population health management through health information technology (HIT) • Increase integration of the health care delivery system, including medical, behavioral health, and social services. • Expand chronic and complex care management models 	<p>What is the impact of health care delivery system and access reform measures on the quality of care delivered by participating providers?</p>	<p>Measures to be determined by metrics included in the specific Hospital DSRIP Plans</p>	<p>Hospital reports</p>	<p>To Be Determined</p>	<p>Semi-annual and annual</p>
<p>Goals: Healthy living; Healthy communities; Access to services.</p> <p>Three Part Aim: Lower cost through improvement</p> <p>Focus Areas:</p> <ul style="list-style-type: none"> • Increase access to services, including primary care and 	<p>What is the impact of DSRIP on managing short and long term per-capita costs of health care?</p>	<p>Measures to be determined by metrics included in the specific Hospital DSRIP Plans</p>	<p>Hospital reports</p>	<p>To Be Determined</p>	<p>Semi-annual and annual</p>

<ul style="list-style-type: none"> preventive services • Increase the effective and efficient use of population health management through health information technology (HIT) • Increase integration of the health care delivery system, including medical, behavioral health, and social services. • Improve health literacy, including nutrition education and tobacco use prevention and control • Expand health and wellness programs and develop incentives for participation in these programs • Expand chronic and complex care management models 					
<p>Goals: Healthy living; Healthy communities; Access to services.</p> <p>Three Part Aim: Better care for individuals; Better health for the population; Lower cost through improvement</p>	<p>How did the amount paid in incentives compare with the amount of improvement achieved?</p>	<p>Measures to be determined by metrics included in the specific Hospital DSRIP Plans</p>	<p>Hospital reports</p>	<p>To Be Determined</p>	<p>Semi-annual and annual</p>

16. Non-Duplication of Federal Funds

Each participating hospital will be required to provide to the state all of the CMS and HHS funded initiatives in which they participate. Also, each hospital will provide a detailed explanation of how the proposed DSRIP activities are not duplicative of already funded activities.

Unique accounting codes will be created within the state accounting system and assigned to DSRIP Pool payments as an additional means to ensure the selected DSRIP project funding does not duplicate existing or future federal funding.

Kansas will claim federal financial participation (FFP) for all DSRIP payments. FFP will only be available for DSRIP payments made in accordance with all pertinent STCs, including

Attachment F DSRIP Planning Protocol and Attachment G DSRIP Funding and Mechanics Protocol. All DSRIP project plans are subject to audits. The state will report DSRIP payments to CMS on the CMS 64.9 waiver form on a quarterly basis, using a specific waiver group set-up exclusively for DSRIP payments.

Pursuant to STC 76, STC 79 and STC's 80 through 84, DSRIP will be a component of the state's quarterly and annual operational reports related to the demonstration. These reports will include:

- All DSRIP payments made to specific hospitals that occurred in the quarter
- Expenditure projections reflecting the expected pace of future payments for each hospital
- A summarized assessment of each hospital's DSRIP project activities during the given reporting period
- Planning, evaluation activities and interim findings pursuant to the reporting requirements outlined in section XI of the Demonstration's STCs

The LPTH and BCCH shall have available for review, by the state and CMS upon request, all documentation evidencing performance as described under the hospital's plan for DSRIP incentive payments. Failure of the LPTH or BCCH to maintain adequate documentation or inaccurate reporting of data may result in recoupment of DSRIP payments.