Kansas Heart & Stroke Collaborative

Overview of Care Delivery Model and Technology
Challenges/Opportunities
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<thead>
<tr>
<th><strong>Kansas Heart and Stroke Collaborative</strong></th>
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<tr>
<td><strong>University of Kansas Hospital received $12.5 million Health Care Innovation Award</strong></td>
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<td><strong>Sept. 1, 2014 - Aug. 31, 2017</strong></td>
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<td><strong>Develop rural clinically integrated network working with HaysMed, 11 CAHs, primary care providers, and specialists in Northwest Kansas</strong></td>
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<td><strong>Focus on regional systems of care for patients at risk of or who have suffered heart attack or stroke</strong></td>
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The Kansas Heart & Stroke Collaborative is a care delivery and payment reform model to improve rural Kansans’ heart health and stroke outcomes and reduce total cost of care:

• Reduce total cost of care for target population by $13.8 million (1.9 percent savings)
• Reduce deaths from heart and cerebrovascular disease by 20 percent
• Sustain project beyond 3-year grant period
Rural Challenges

• Inconsistent adoption of current evidence-based guidelines for time critical diagnoses
  – Rarely met goal of cardiac catheterizations within 90 minutes of first medical contact
  – < 3% of eligible patients with ischemic stroke received thrombolytic therapy
• Higher mortality rates in rural Kansas
• Higher hospital readmissions in rural Kansas
• Cost-based reimbursement models of Critical Access Hospitals, Rural Health Clinics, and Federally Qualified Health Centers
Rural Challenges

• Encounter based payment model
  – Coding accuracy reflecting actual clinical activity and diagnosis

• Independent practices
  – Different EMR in Hospital compared to Clinic
  – 7 different EHR’s across clinical practices
  – Low uptake of HIE in clinics compared to hospitals

• Limited local resources/expertise

• Narrow or no Operating Margins
Pursuing Performance Improvement

• Many rural providers lack infrastructure to support formal PI programs

• Leveraging resources across Collaborative communities
  – Data extraction, normalization, analysis, and reporting
  – Develop, implement, and monitor specific PI initiatives
KHSC’s Rural Clinically Integrated Network Model

PROCESS STRATEGIES and TACTICS

Phase I – Acute Care protocols, education and specialty support to improve outcomes and reduce readmissions through timely care
  - Avera eEmergency telemedicine support and
  - Post-acute Regional Transitional Care Management

Phase II – Local Health Coaches to implement Chronic Care Management to coordinate services and engage patients
  - Technology to capture and bill CCM

Phase III – Population Health Management to reduce incidence, improve care and quality, and establish shared savings payment models
KHSC Support Tactics

Phase I
- Stroke and STEMI protocols and boot camps, TCM providers hired, trained and deployed and eEmergency installation and utilization. Baseline data collected and quarterly thereafter.

Phase II
- Health coach recruitment and training, develop CCM documentation and reimbursement assistance; technology to support and coordinate

Phase III
- CMS Claims data risk analysis and patient stratification; develop registries, QI dashboards and clinic care pathways; develop shared savings payment models. Technology to support that addresses disparate EHR’s across large area.
KHSC Model

Phase III – Population Health Management

• Challenges: multiple EHR’s, few with patient Registries, and little use of data for performance management
  – Goal, reducing risk of first or subsequent MI/Stroke
  – Identify technology to connect disparate EHR’s to accomplish goals of Patient Registries, metrics and dashboards for performance improvement at each site
  – Push/Pull Query that’s sustainable and functional for our needs

• New Technology Option – HMS/Lacie
  – Create Registries and Dashboards for each participating site
  – Creating a Private Health Information Exchange
  – On boarding and validating first 10 clinics
KHSC Sustainability beyond CMMI 3-Year Award

Transitional Care Management Fee-For-Service
  – Documentation template for moderate and high acuity codes

Chronic Care Management Fee-For-Service
  – Documentation and billing guidance to support local health coaches and clinic revenue streams, including RHC’s

Disease-specific Shared Savings/Episodic Bundled Payment Model
  – Actuarial estimates of as much as $1 million per year, per region, under a NO RISK, upside only, payment model
  – RCIN opportunity for other 3rd party payer contracting
Findings

1. KHSC’s acute and ambulatory interventions are succeeding
2. KHSC participation is accelerating beyond expectations
3. KHSC is sustainable through FY 2020, and
4. KHSC could generate significant shared savings revenue through the MSSP (Medicare Shared Savings Program) as Episodic Bundled Payment Model demonstration will be by claims only.
<table>
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<tr>
<th>Measure</th>
<th>Description</th>
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<tr>
<td>Measure 1</td>
<td>Median arrival time to EKG performed (minutes)</td>
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<tr>
<td>Measure 2</td>
<td>Median arrival time to interpretation of EKG (minutes)</td>
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<tr>
<td>Measure 3</td>
<td>Median arrival time to administration of thrombolytic (minutes)</td>
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<tr>
<td>Measure 4</td>
<td>Median arrival time to obtaining non-contrast head CT scan (minutes)</td>
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<tr>
<td>Measure 5</td>
<td>Median arrival time to interpretation of head CT scan (minutes)</td>
</tr>
<tr>
<td>Measure 6</td>
<td>Median arrival time to administration of thrombolytic (minutes)</td>
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- Protocols adopted in February 2015
- 3,952 patients treated pursuant to protocols to date
STEMI Success

• Previously found no STEMI getting to PCI within 90 minutes from First Medical Contact
  – Significant improvement in time to thrombolytic in those hospitals more than 1 hour from PCI
  – Increasing percentage of STEMI patients with Door In to Door Out at CAH of 30 minutes or less
    • Includes both patients receiving thrombolytic or those transferred for primary PCI
    • Record so far is 13 minutes!!
STEMI/Stroke Response Times

Collaborative: Median Arrival Time to Intervention
Baseline, Q4, Q5, Q6, & Target

3952 patients through Q7
KHSC Impact on Ischemic Stroke

• Initial analysis showed <3% eligible received thrombolytic
  – In the first year of KHSC, this rate went up to 18%
  – Still seeing significant number presenting outside the ideal window for thrombolytic therapy (65%)
  • Indicates ongoing need for community education around awareness of signs and symptoms of stroke and calling 911!
Transitions of Care and Care Coordination

• Transitional Care Managers
  – 2 APRNs provided 569 services during first six months
  – Funding for up 4 APRNs through August 2017 as KHSC expands

• Health Coaches
  – Numbers are expanding, including adding ehealth coaches
  – On boarded Cerner HealtheCare module mid-August
  – Establishing agreement for KHSC to bill CCM for KHSC sites
  – Funding for 10 full-time and 21 half-time health coaches through August 2017

• Contracted Physician Champion in each community
2. COLLABORATIVE EXPANSION
Additional Participants

• Initial focus on hospitals and affiliated physician practices
• Now engaging additional provider types
  – Safety net providers
  – Long-term care facilities
  – EMS
• Including sustainability plan of moving to MSSP/ACO and creating Patient Safety Organization
KHSC/KCIC Participation Map  September 2016

Kansas Heart and Stroke Collaborative
A program of The University of Kansas Hospital
Expanded Clinical Interventions

• Introducing sepsis as additional time-critical diagnosis
• Incorporating resiliency training into care management services with focus on congestive heart failure
• Strong interest in expanding to other chronic conditions such as COPD and diabetes
CMS Opportunities

- Expanded care management services
- Participation in Medicare Shared Savings Program
  - Formed new legal entity – Kansas Clinical Improvement Collaborative
  - Submitted MSSP Application Sept. 6th with 20 sites signed up
    - Will expand need to assess, monitor and report on 33 clinical metrics
Commercial Payers and Management Service Organizations (MSOs)

• Contract with payers as a clinically integrated network

• Negotiation of FFS rates remains with individual providers
  – No single signature rate contracts
  – No messenger model
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