A Note from Sandra Van Trease

Since our creation in 2012, BJC Collaborative (BJCC), an organization of eight health systems — BJC HealthCare, CoxHealth, Memorial Health System, Saint Luke's Health System, Blessing Health System, Decatur Memorial Hospital, Sarah Bush Lincoln Health System, and Southern Illinois Healthcare — has made a significant impact to our region by pooling our individual strengths as market-leading, independent, non-profit health care systems. Our Collaborative enables us to enhance the quality of health care provided to the patients we serve, provide meaningful population health benefits, and reduce the cost of health care services. In 2018, important progress was made in each of these areas through our strategic initiatives including Collaborative Care Management Resources (CCMR), oncology collaborations, and the realization of meaningful economic savings.

Some highlights of our accomplishments in 2018 include:

• **Significant progress in developing population health capabilities through Collaborative Care Management Resources (CCMR).** Five of our members continue pursuing this endeavor to jointly build standard capabilities that enhance the value of the provision of health care services and to ultimately improve quality and reduce the total cost of providing care to patients. Together we are analyzing data on patients with diabetes, heart failure and COPD/Asthma to identify interventions to improve clinical quality and cost of care, directly benefiting the diverse populations we reach across Missouri and southern Illinois.

• **Furthering oncology collaborations to advance our cancer care and program capabilities.** Importantly, six of the member health systems of BJC Collaborative are participating in our first Collaborative clinical trial – a non-therapeutic clinical trial in lung cancer screening. The joint research infrastructure developed for the BJCC lung screening trial will help foster additional clinical research initiatives in the future.

• **Achieving over $84 million in savings in clinical engineering and supply chain.** In 2018, we collectively achieved more than $84 million in savings in clinical engineering and supply chain, which totals more than $380 million in savings since BJCC’s inception in 2012.

The past year was also pivotal for the leadership and future direction of BJC Collaborative. Rich Liekweg succeeded Steve Lipstein as the chairman of the BJC Collaborative board and convened member health system CEOs for a strategic retreat to set the future vision for BJC Collaborative and identify opportunities for creating additional value. With strong commitment to the vision, all health system member CEOs endorsed an enhanced, value-creating Collaborative, targeting pioneering and transformative innovations over the next several years.

Specifically, in 2019, we will continue our work in CCMR, oncology and pursuing economic efficiencies while exploring the potential in new areas such as virtual care, alternative payment models and genomics/precision medicine. Six years in, with reaffirmed commitment from each member to “go the distance” with BJC Collaborative, we are excited to continue this innovative journey into 2019 and beyond.

Sandra Van Trease, BJC Collaborative Executive Sponsor and BJC HealthCare Group President
Richard Liekweg  
BJC HealthCare  
President and CEO

Steven Edwards  
CoxHealth  
President and CEO

Edgar Curtis  
Memorial Health System  
President and CEO

Melinda Estes, MD  
Saint Luke’s Health System  
President and CEO

Maureen Kahn  
Blessing Health System  
President and CEO

Timothy Stone Jr.  
Decatur Memorial Hospital  
President and CEO

Jerry Esker, RPh  
Sarah Bush Lincoln Health System  
President and CEO

Rex Budde  
Southern Illinois Healthcare  
President and CEO

BJC Collaborative by the numbers

- 8 Health systems
- 41 Hospitals
- 11.2 million Service area population
- 71,385 Employees
- 8,270 Affiliated physicians
- 6,903 Staffed beds
- 329,676 Annual admissions
- 1.2 million Annual emergency visits
- $1.05 billion Annual community benefit
- $10.6 billion Annual net revenue
Collaborative Care Management Resources (CCMR)

CCMR is a joint population health endeavor developed by five of our health system organizations – BJC HealthCare, Blessing Health System, Decatur Memorial Hospital, Sarah Bush Lincoln Health System and Southern Illinois Healthcare. The goal of CCMR is to use data analytics to improve clinical quality and reduce the total cost of care in preparation for risk-based contracting.

Since its inception in the fall of 2016, much of CCMR’s work has been focused on the ingestion and validation of clinical and claims data sources from each of the five participating systems – a significant feat but one that is necessary to accurately assess clinical risk and manage population health. Prior to this endeavor, most of these systems had not aggregated clinical and claims data internally. Now each system has not only achieved this aggregation individually, but we have also achieved this across all five CCMR members.

In 2018, CCMR focused on the development and operationalization of an online dashboard that aggregates select, de-identified data from each system on the initial common population of focus, Employee Health Plan (EHP) patients with a diagnosis of diabetes, heart failure and COPD/Asthma.

Across CCMR, the participating systems are now reporting on this data monthly to help pinpoint areas for joint interventions to impact clinical quality and cost of care. For example, in looking at data across all five CCMR systems, diabetic patients that fall within the moderate risk category have notable emergency department (ED) utilization. Digging deeper, data from one of the CCMR member health systems showed that some of the moderate risk diabetic EHP members had accessed the ED for sprains, headaches, urinary tract infections and other non-urgent issues that potentially could have been addressed in a primary care or urgent care setting. This newly gleaned data has positioned the CCMR members to explore initiatives such as:

- Developing care management processes that directly address ED utilization issues in the moderate risk category, developing in-depth care management plans for the high utilizers.
- Implementing education and wellness initiatives that address high-risk, costly care to identify more appropriate sources for non-urgent care.
- Exploring whether benefit design is providing enough incentive for EHP employees and their dependents to choose care in the most appropriate setting for their condition.
Case showing positive impact of CCMR care management efforts

With the help of a care manager at a CCMR member system, a diabetic patient was able to achieve healthy blood sugar levels. By empowering this patient with the information and resources to better manage his health, he is now less likely to experience an adverse health event associated with diabetes.

Moving into 2019, CCMR will be pursuing these types of initiatives and others to foster development of the competencies and capabilities needed to succeed under risk-based contracts that are increasingly linked with clinical and cost performance metrics.

Identify Care Management Need and Contact Patient

- Care manager used CCMR online dashboard to identify a diabetic patient and employed CCMR-aligned care management protocols to connect with patient, schedule a physical, and share educational information

Monitor Patient

- Care manager saw that high blood sugar levels were recorded at the patient’s physical and reconnected with patient
- Patient shared that he had not obtained his medications and did not understand his drug regimen

Patient Follow-up

- Care manager educated patient on drug regimen and ensured he filled prescriptions

Result

- Patient lowered his blood sugars to a normal range and is maintaining healthy levels

Alongside work efforts to develop and operationalize the online dashboard, CCMR members worked together to implement aligned, evidence-based care management protocols across the five systems. These initiatives enabled the care managers at each system to provide EHP patients with the information and resources they need to stay healthy.
Oncology Collaborations

With the goal of reducing the incidence of cancer among the patients served by BJC Collaborative member cancer centers, clinical and administrative leaders from across BJC Collaborative have been focused on building relationships and developing infrastructures to enhance coordination among their respective cancer centers.

In the wake of new technology that enables earlier detection of lung cancer, BJC Collaborative has focused specifically on improving the prevention and early detection of lung cancer through several initiatives, including:

- Creating a **BJC Collaborative Lung Screening Dashboard** to track and set targets for improvement on metrics related to lung screening, such as the number of screenings performed and number of early-stage lung cancer diagnoses detected.

- Finalizing a **Physician Billing Guide for Smoking Cessation Counseling** to educate physicians on reimbursement requirements for these services and encourage physicians to initiate smoking cessation counseling with their patients.

- Updating a **Lung Screening Program Reference Guide** for BJCC systems to use as a shared resource in the development and growth of their lung screening programs. The Reference Guide focuses on Medicare eligibility and reimbursement, low-dose CT screening guidelines, staffing models, and follow-up workflows.
First Joint Clinical Trial – BJC Collaborative Lung Screening Trial

These efforts ultimately culminated in six BJC Collaborative members – BJC HealthCare, CoxHealth, Decatur Memorial Hospital, Memorial Health System, Sarah Bush Lincoln Health System and Southern Illinois Healthcare – embarking upon their first clinical trial collaboration – a lung cancer screening trial.

Developed within Siteman Cancer Center, the BJCC lung screening trial aims to educate primary care providers on understanding eligibility criteria for lung cancer screening, developing clear referral pathways for screening, managing a patient’s care throughout the screening process, and ensuring that proper documentation and follow-up occurs after the screening. The trial will begin with its first screening site in early 2019, and a new screening center will be added every three months. By nine months post-intervention delivery, on average, the number of lung cancer screenings per screening center site per month is projected to double.

The joint research infrastructure developed for the BJCC lung screening trial will help foster additional clinical research initiatives in the future.

Operations Committees

Supply Chain and Information Technology, in partnership with Mid-America Service Solutions (MSS)

MSS is a Vizient member business venture that provides contracting, distribution and other consolidated services, with primary goals of reducing expenses and improving operational efficiency. Six BJC Collaborative members are owners of MSS and all eight are members of MSS.

In concert with MSS, BJC Collaborative members achieved $19.8 million in supply chain savings in 2018. Since 2012, the Collaborative has totaled nearly $78 million in supply chain savings and $28 million in information technology savings.

Clinical Engineering Operations Committee (CEOC) and Clinical Asset Management (CAM) Shared Services

In 2018 the CEOC achieved $64.5 million in savings for BJC Collaborative members through capital equipment bundled purchases, best value sourcing of parts and service, asset recovery and redeployment, and shared trainings. The CEOC has achieved nearly $275 million in total savings since 2012.

In 2017, BJC Collaborative launched the Clinical Asset Management (CAM) Shared Services pilot among four participating systems (BJC HealthCare, Memorial Health System, CoxHealth, and Blessing Health
Using the Shared Database for Capital Planning

System) to explore the development of a clinical asset management shared services arrangement. The pilot participants implemented standardized coding and nomenclature for clinical assets and converted to a shared clinical asset management database.

In 2018, we focused on generating reports from the shared database to enable enhanced capital planning, analytics, and expense management capabilities. Pilot members report that the CAM Shared Services provides value and that the newly created Medical Asset Replacement Recommendation Summary (MARRS) reports will enable a more formal, proactive bundling process, allowing for significantly greater savings than have already been achieved in clinical engineering.

<table>
<thead>
<tr>
<th><strong>Total BJC Collaborative Savings 2012-2018</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operations Committee</strong></td>
</tr>
<tr>
<td>Clinical Engineering Operations Committee (CEOC)</td>
</tr>
<tr>
<td>Supply Chain Operations Committee/MSS</td>
</tr>
<tr>
<td>Information Technology Operations Committee</td>
</tr>
</tbody>
</table>
System-to-System Clinical Initiatives

BJC Collaborative facilitates exploration and, ultimately, implementation and expansion of clinical programs and services between and among its health system members to improve access to and quality of health care for patients. These clinical agreements are excellent examples of how BJCC members are working together to enhance care and convenience for patients in their local communities.

Building on the established service line initiatives that remain active between health system members, including on-site clinics, telemedicine, and consulting services in areas such as pediatric urology, maternal/fetal medicine and trauma services, several new initiatives were established in 2018 that have improved patient access to high quality specialized clinical services.

For example, Washington University physicians at St. Louis Children's Hospital in the BJC HealthCare system are now providing telemedicine services to pediatric cystic fibrosis patients at CoxHealth. Instead of traveling for care during flare-ups – which often occur regularly and require weeks of hospitalization – patients are now able to stay close to home at CoxHealth and connect to Washington University pediatric specialists virtually rather than travel to St. Louis. In addition to keeping family close by, these efforts help control expenses related to being away from home and limit the disruption to work and other responsibilities.
Looking Forward – Exploration of New Transformational Initiatives

Moving forward, BJC Collaborative will explore the potential to pursue initiatives in new and transformational initiatives such as:

Virtual Care

With a goal of improving speed and access of care, BJC members believe that virtual care is a promising domain for joint exploration. Moving forward, members will assess the current state of their respective virtual care initiatives and platforms, and develop an in-depth understanding of the regions’ needs. Working together, BJC Collaborative will explore options for delivering virtual care directly to health care consumers.

Alternative Payment Models

BJC Collaborative members will continue working together to develop the capabilities needed to be successful under at-risk contracts. Ultimately, members aim to understand the key drivers associated with improving clinical quality and lowering the cost of care while operating successfully under alternative payment models.

Genomics & Precision Medicine

There is strong interest to jointly tap into recognized national expertise in genomics and precision medicine. Work in this area may include exploring the potential to develop a shared genomic database and conduct enhanced testing with the goal of delivering even more specialized, personalized medical treatments to patients.
Long-term vision of BJC Collaborative

Ultimately, BJC Collaborative members believe that working together, learning from one another and problem solving together will become even more important in the future, as health care organizations strive to serve their communities.

While there are many unknowns as to what providers of health care services will face in the future, BJCC member systems look forward to continuing to work on innovative ways to address the health needs for the 11.2 million people living in the communities we serve. Each member health system organization is made stronger by working together and with intentional, collective efforts, can have a powerful impact on the health of the region.

Uniquely positioned to take on the opportunities and challenges of the future, BJC Collaborative is focused on leading innovation and transformation to advance health care for everyone.

Enhance delivery of clinical programs and services for our patients and communities

Improve the quality and experience of care provided to patients

Provide meaningful population health benefits across the region

Reduce the total cost of health care services