CJR Model

Implementation Toolkit

A Roadmap To Success And Healthy, Active People

Disclaimer: This document is a compilation of change concepts, strategies, tactics, tools, and resources used by participant hospitals designed to help organizations implement process changes that may accelerate their successful adoption of bundled payment strategies under the CJR model. This document does not serve as advice provided by the Centers for Medicare & Medicaid Services (CMS). CMS and the Department of Health and Human Services Office of the Inspector General have not verified this document as compliant with Title 42 CFR Part 510. Although every reasonable effort has been made to assure the accuracy of the information within these pages, the ultimate responsibility for compliance with the regulations associated with the CJR model lies with the provider of services.

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October 2018
Introduction

The Comprehensive Care for Joint Replacement Model

The Comprehensive Care for Joint Replacement (CJR) model promotes higher quality and more efficient care for Medicare fee-for-service beneficiaries undergoing hip or knee replacement. The model covers episodes for beneficiaries that are ultimately discharged under MS-DRG 469 (major joint replacement or reattachment of lower extremity with major complications or comorbidities) or 470 (major joint replacement or reattachment of lower extremity without major complications or comorbidities), beginning with the hospital admission and ending 90 days post-discharge. CJR participant hospitals are paid on a fee-for-service schedule, then bundled payments and quality measures are retroactively incorporated into the model via reconciliation payments. CJR participant hospitals are financially accountable for the quality and cost that fall into each CJR episode of care. During reconciliation, hospitals may receive additional payments if their actual episode costs fall under the designated target price and quality metrics are met or exceeded, or be required to repay Medicare for a portion of the episode spending if their actual episode costs exceed the target price. The model's structure promotes coordination throughout the episode among providers from different settings, including hospital staff, surgeons, and post-acute care facilities. The model began on April 1, 2016, and ends on December 31, 2020. As of October 1, 2018, approximately 491 hospitals were participating in the CJR model. More information about the CJR model can be found on the Center for Medicare & Medicaid Innovation (CMMI) website.

Overview of the CJR Model Implementation Toolkit

The CJR Model Implementation Toolkit was developed by the CJR Learning System to outline the various strategies that CJR participant hospitals are employing as part of their care redesign activities. Hospitals can use the Toolkit to support their CJR Model implementation efforts. There is not a single, unidirectional pathway to improve patient outcomes and reduce episode costs within the CJR model – the most optimal strategies for your hospital may not be appropriate for another hospital. Your hospital’s patient volume, size, regional characteristics, business structure, patient demographics, and available community resources, as well as how far along you are in implementing the CJR model, will be key in determining which of the strategies outlined in this Toolkit may have the greatest impact for patients undergoing lower extremity joint replacement (hereon referred to as “patients”).

The CJR Model Implementation Toolkit was developed from data collected by the CJR Learning System from a subset of participant hospitals. The data presented here are not representative of all CJR participant hospitals. CJR participant hospitals’ experiences, successes, and challenges within the model were gathered across multiple data sources, including interviews with CJR participant hospital staff; CJR Learning System needs assessments; transcripts, chat logs, and Q&A logs from CJR Learning System webinars, action groups, and affinity groups; CJR Connect Chatter; and resources shared with the CJR Learning System by participant hospitals. The data were systematically analyzed, and a menu of strategies are outlined below. The change tactics mentioned in this document are based on experiences of CJR participant hospitals and are not officially endorsed by CMS.

1 The CJR Connect site is CMMI’s online knowledge management and peer collaboration platform for CJR participant hospitals. Users can stay informed about upcoming CJR Learning System events, download resources, and ask questions and offer advice on promising practices under the CJR model. It is intended to foster communication and peer-to-peer collaboration. The site is only available to current and former CJR participant hospitals.
The implementation strategies identified by CJR participant hospitals have been organized into a framework called the CJR Model Driver Diagram (Exhibit 1). A driver diagram is a tool that demonstrates what “drives” a desired outcome by drilling down into key activities impacting that aim (organized below as primary, secondary, and tertiary drivers). This type of visual display is a useful reference for a team testing changes and can also be used to communicate these efforts to stakeholders. A driver diagram can be referenced throughout the implementation of care redesign efforts to ensure that ongoing activities are aligned with and in support of the project aim. It also may help to create opportunities for teams to reassess on which strategies they are focused. While the CJR Driver Diagram encompasses most of the strategies that may be implemented as part of the CJR model, this Toolkit is not intended to be comprehensive or prescriptive in nature.

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2 Defining and Using Aims and Drivers for Improvement: A How-to-Guide (January 2013)
Efficient Inpatient Operations

CJR Implementation Infrastructure

Supply Chain Management

Care Team Staffing

Data-Driven Continuous Quality Improvement

Data Collection, Analysis, and Reporting Infrastructure

Data-Driven Improvement Strategies

Relevant and Precise Measurement

Caregiver Education and Engagement

Encourage Collaboration

Beneficiary Identification, Notification, and Tracking

Collaboration on Implementation of Clinical Protocols and Pathways

Beneficiary and Caregiver Education and Engagement

Risk Stratification

Standardized, Evidence-Informed Clinical Protocols

Coordination Across the Care Continuum

Right Care, Right Time

Fully Recovered, Healthy, Active People
# Table of Contents

## Efficient Inpatient Operations

- CJR Implementation Infrastructure .................................................. 6
- Supply Chain Management .............................................................. 8
- Care Team Staffing ........................................................................ 9

## Data-Driven Continuous Quality Improvement

- Data Collection, Analysis, and Reporting Infrastructure ................. 10
- Relevant and Precise Measurement ................................................. 11
- Data-Driven Improvement Strategies .............................................. 12

## Right Care, Right Time

- Standardized, Evidence-Informed Clinical Protocols ..................... 13
- Risk Stratification ........................................................................... 15
- Beneficiary and Caregiver Education and Engagement .................. 16

## Coordination Across the Care Continuum

- Beneficiary Identification, Notification, and Tracking ................. 18
- Implementation of Clinical Protocols and Pathways ....................... 20
- Encourage Collaboration ................................................................. 22
Based on feedback from CJR participant hospitals, creating an infrastructure for CJR implementation may help CJR participant hospitals more efficiently manage the changes needed to successfully implement the model.

**TACTICS**

- Educate stakeholders about the CJR model and obtain buy-in for implementation
- Convene a workgroup or committee specifically dedicated to the strategic direction, oversight, and operations of the CJR model

Several participant hospitals have reported designating at least one staff person to learn about the model’s structure, requirements, and goals, and to then educate other stakeholders about the key components of the model. These hospitals noted a variety of ways to educate stakeholders, including brochures, letters, meeting presentations, online training modules and in-services. Participant hospitals have found that while the content and level of detail that is beneficial to share varies based on the stakeholder, some key talking points that have helped with obtaining buy-in for changes associated with the CJR model at their hospitals include:

- The hospital is at financial risk for the care of patients who qualify for the CJR model for the 90 days following the joint replacement, not just the inpatient stay;
- The CJR model incentivizes the maintenance and improvement of quality, not just cost reduction; and
- There are regulatory requirements associated with participation in the model, such as beneficiary notification and submission of information about relationships with CJR collaborators, collaboration agents, and downstream collaboration agents.

Participant hospitals also have convened stakeholders into workgroups or committees tasked with identifying, executing, and monitoring strategies to achieve success in the CJR model. Some participant hospitals have chosen to organize these workgroups or committees around the different stages of the care continuum (e.g., pre-operative, acute, post-acute) or components of CJR model implementation (e.g., clinical redesign, costs, information technology infrastructure). The best reporting line for the CJR model varies by hospital, but many CJR participant hospitals have found success with embedding their CJR workgroups within their value-based care, population health, case management, or orthopedic service lines. Regardless of where the CJR committee(s) resides within the organization, participant hospitals have found that it is beneficial to include multiple disciplines such as
finance, information technology, clinical directors and staff from many departments, quality improvement, operations, registration, legal/compliance/regulations, coding, and case management. Participant hospitals noted that these committees typically meet frequently (e.g., monthly, biweekly) when first formed; as changes become institutionalized, the meetings tend to occur less often (e.g., quarterly).
Supply Chain Management

According to some CJR participant hospitals, reducing internal expenditures associated with the devices and surgical supplies surgeons use may help generate internal costs savings.

TACTICS

- Negotiate costs of surgical supplies/implants
- Encourage the use of lower cost supplies/implants that do not reduce patient outcomes

PATHWAYS TO CHANGE

CJR participant hospitals have reported that reviewing internal cost data or publicly-available joint replacement registry data has helped in identifying opportunities to reduce internal costs associated with implants, sutures, surgical screws, bone cement, etc. Some tactics reported by CJR participant hospitals in lowering costs include:

- Collaborating with vendors to reduce costs on current implants and surgical supplies. This collaboration has entailed negotiating prices with vendors individually or setting a maximum price for supplies and then issuing requests for proposals to vendors who are willing to accept that price.
- Using less expensive, but equally clinically effective versions of devices and surgical supplies. Participant hospitals have found that surgeons often are unaware of device and surgical supply cost variations within the market and across surgeons performing the same surgery within the hospital. Once they review cost and quality data, they often recommend and adopt lower cost, but equally clinically effective, alternatives.

TOOLS & RESOURCES

Interpreting and Communicating High Cost/Low Quality Drivers: Deep Dive on Physician Data

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4 See Disclaimer on the cover page of this document.
Some CJR participant hospitals have found that reviewing the team currently caring for CJR beneficiaries may lead to efficiencies in the model.

**TACTICS**

- Use less-specialized providers (e.g., nurse practitioners rather than hospitalists), when appropriate
- Enlist care coordinators/care navigators to fulfill duties (e.g., beneficiary education/engagement, beneficiary pre-operative assessment and optimization, care coordination across providers/settings) that support the hospital’s efforts under the CJR model

**TOOLS & RESOURCES**

Care Navigator Interviews Content Pack

CJR participant hospitals have reported that utilizing providers with less specialized credentials allows more highly specialized providers to focus on the activities only they can complete. For example, some hospitals have paired nurse practitioners with surgeons to help reduce the need for hospitalist consults. Other hospitals have used physical therapy aides, patient care technicians, or even student volunteers to ambulate CJR beneficiaries early and often after surgery to allow physical therapists to focus on more complex cases.

Some CJR participant hospitals have added a new care coordinator or care navigator role to the care team to help fulfill duties vital to their CJR efforts. These care coordinators/navigators have been tasked with a variety of responsibilities including, but not limited to, teaching joint classes; assessing patients prior to surgery to identify and address psychosocial needs; supporting beneficiary pre-optimization, such as providing smoking cessation information; collaborating with post-acute care providers and community resources to promote a patient’s optimal recovery; and communicating with patients post-operatively in an effort to reduce readmissions. Participant hospitals have reported being strategic about the credentials they require their care coordinators/navigators to have, ensuring that the individual’s skills and experience closely fit the activities for which he or she will be responsible. Registered nurses (RNs) were most commonly identified in this role. Additional clinician types for the care coordinator/navigator role reported by hospitals include:

- Nurse practitioners who may be able to order medications and treatment (depending on state laws), thereby streamlining provider communications and activities;
- Physical therapists who may better understand healing nuances specific to joint replacements; and
- Social workers who may best serve populations with psychosocial needs that interfere with recovery.

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5 See Disclaimer on the cover page of this document.
Many CJR participant hospitals have shared that collecting, analyzing, and reporting process measures, patient outcomes, and cost data has allowed them to prioritize on which care redesign efforts they should focus.

**TACTICS**

- Adopt, configure, or upgrade technological tools to support data collection, analysis, or display
- Leverage or acquire internal or external analytic expertise
- Collect and report patient reported outcomes (PRO) and risk variable data

**TOOLS & RESOURCES**

- Implementation of Patient-reported Outcome Measures in Total Knee Arthroplasty
- Patient-reported Outcome Measurement for Patients with Total Knee Arthroplasty
- Using Data to Drive Improvement: Part 1
- Using Data to Drive Improvement: Part 2

**PATHWAYS TO CHANGE**

Some CJR participant hospitals have found that providing stakeholders with frequent, up-to-date information about opportunities for care improvement supports their ability to plan strategically and prioritize care redesign actions. To meet these needs, hospitals have reported leveraging internal data sources such as care navigators’ tracking spreadsheets, electronic medical records, and business operations data, and integrating and reconciling these data with CMS claims data, when available. Some hospitals have configured their electronic medical records to output patient reports that help identify trends in patient process and outcome measures, allowing clinical leadership to hone in on high-impact cost and quality drivers. Others are creating dashboards that display outcome, quality, and/or cost data at regular intervals or in real-time and reviewing this data with internal, and sometimes external, stakeholders on a regular basis.

Based on feedback from CJR participant hospitals, staff in the quality improvement, finance, information technology, or healthcare analytics departments may have the expertise to identify, access, integrate, and analyze the data outlined above. However, some have reported partnering with software vendors, consulting firms, and professional membership organizations to assist them in these efforts.

Hospitals noted that it may be useful to develop a process for collecting PRO and risk variable data in order to measure progress and identify areas for improvement in patient outcomes, and also to improve CJR participant hospitals’ overall composite quality score. Some are collecting this data electronically via patient-facing portals that are integrated into the electronic medical record, or by email. Others are requesting it in person during appointments at the surgeon’s office or at the joint surgery education class. Finally, some participant hospitals have reported conducting outreach over the phone and by mail to collect this data. Hospitals often indicated that they were using multiple strategies simultaneously, depending on patients’ comfort levels with the available technology and the total number of patients requiring outreach.

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6 See [Disclaimer](#) on the cover page of this document.
Relevant and Precise Measurement

CJR participant hospitals have reported that relevant and precise measurement provides a picture of how well the hospital and its providers are performing under the CJR model, allowing them to hone in on the areas truly in need of improvement.

TACTICS

Identify process and outcome measures available in internal (e.g., EHR, business intelligence) as well as CMS-provided (e.g., claims, monitoring reports, reconciliation reports) data

TOOLS & RESOURCES

- Identifying and Communicating High Cost and Low Quality Drivers: Learnings from the Data Affinity Group
- Using Data to Drive Improvement: Part 1
- Using Data to Drive Improvement: Part 2
- Interpreting and Communicating Data: Using Dashboards to Build Engagement and Drive Results
- Interpreting and Communicating High Cost/Low Quality Drivers: Deep Dive on Physician Data
- Interpreting and Communicating High Cost/Low Quality Drivers: Deep Dive on Post-Acute Care Provider Data

CJR participant hospitals are collecting and reporting on a variety of data:

- **Patient characteristics** data, such as demographics and case mix index;
- **Care process** data, such as process and workflow maps, timing and frequency of physical therapy and home health visits, attendance rates for patient education classes, and clinician adherence to agreed-upon clinical protocols;
- **Procedural** data, such as surgical supplies, tools and implants, time to operating room for fracture patients, time in operating room, on-time starts in the operating room, and intraoperative pain management;
- **Care outcomes** data, such as inpatient and skilled nursing facility length of stay, discharge disposition, functional status, deep vein thrombosis (yes/no), pulmonary embolism (yes/no), surgical site infections (yes/no), patient satisfaction, readmission rates, emergency department visits, and mortality; and
- **Cost** data, such as setting-specific, per-episode, and total cost of care.

Several hospitals indicated that they are trending these measures over time in order to track their performance relative to hospital-specific goals and peer, local, or national benchmarks.

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CJR participant hospitals have found that the right data shared broadly has helped them build momentum for engagement in care redesign, allowing them to identify opportunities for improvement and best practices to sustain and spread.

**TACTICS**

- Develop and share dashboards (preferably un-blinded) displaying progress towards metrics
- Perform root cause analyses of outlier cases and low performance

**TOOLS & RESOURCES**

- Care Redesign in Joint Care

Many CJR participant hospitals have emphasized that sharing easy-to-interpret, actionable data has enhanced their ability to engage in continuous quality improvement. For example, score cards and dashboards that display quality and cost outcomes in simple and intuitive visualizations have helped hospital audiences quickly see trends, areas for improvement, and successes. According to these hospitals, low-cost tools such as Excel, Tableau, and Access have sufficient functionality to produce useful data visualizations; some hospitals also have this capability in their electronic medical records. Many hospitals reported that they are sharing un-blinded data to encourage healthy competition and make it easier to understand what is driving trends.

CJR participant hospitals have found it beneficial to share data broadly, as many disciplines within the hospital have expressed interest in CJR model progress and have supported trend interpretation and improvement efforts. Hospitals are sharing data with a variety of staff including surgeons, anesthesiologists, pharmacists, nurses, navigators, case managers, executive sponsors, and operations team members. In some cases, hospitals are tailoring which metrics they share, depending on the target audience. For example, aggregate measures of care outcomes and cost may be of most interest and relevance to executive leadership, while clinical staff may need procedural and care process data at the physician, procedure, or post-acute care facility level to be engaging and useful.

Hospitals are presenting these data during regularly scheduled, discipline-specific meetings to make data review and discussion convenient; some hospitals have found it helpful to have one-on-one meetings to review data associated with a specific clinician in detail. According to CJR participant hospitals, during these data reviews, it is important to not only address low-performing metrics, but also identify what is working well and work to sustain and spread the practice to other units, procedures, or staff. Several hospitals have utilized formal quality improvement methods – such as Lean, Plan Do Study Act cycles, chart reviews, patient journey mapping, and patient readmission interviews – to help accomplish this; others have relied on their CJR team’s experience and expertise to identify the root causes of their trends.

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8 See [Disclaimer](#) on the cover page of this document.
CJR participant hospitals have reported that they are refining or standardizing their clinical protocols to make patients ready for discharge sooner, improve patients’ chances of being discharged to a lower-acuity post-acute care facility, and prevent emergency department visits and readmissions.

**TACTICS**

- Create formal/structured opportunities to educate staff and clinicians (e.g., via grand rounds, sponsoring continuing medical education) about evidence-informed clinical protocols
- Develop tools (e.g., decision trees, process maps) that enable standardized use of clinical protocols
- Use fewer disabling medications
- Ambulate patients post-operatively early and often
- Provide physical therapy post-operatively early and often
- Prevent infections
- Prevent pulmonary embolism and deep vein thrombosis

Some hospitals have indicated that they consult peer-reviewed literature and professional associations when considering changes to clinical protocols. Five areas of clinical care have emerged as common focal points for protocol refinement and standardization among CJR participant hospitals:

**Infection Prevention:** CJR participant hospitals reported that they have reinforced or refined processes for surgical site sterilization, begun testing patients for bacterial presence prior to surgery, and reduced practices that they have found to be associated with infection (e.g., using Foley catheters).

**Ambulation:** Many hospitals have shared that getting patients up and walking sooner (e.g., the day of surgery) and more frequently (e.g., twice a day) after surgery promotes recovery. Using mobility aides, patient care technicians, or student volunteers to supplement unit nurses’ ambulation efforts has enabled early and frequent ambulation. Decreasing patients’ resistance to ambulation by setting clear expectations for ambulation during pre-surgical communications; offering patients the ability to eat lunch as a group in a room to which they must walk to attend; and giving patients shorts and sneakers to encourage them to see themselves as actively engaged patients has also helped hospitals meet their ambulation goals.

**Pain Management:** Some hospitals have begun to minimize the use of opioids, patient-controlled analgesia, and femoral blocks, and increase the use of regional, short-term blocks to reduce medication side effects such as nausea and muscle weakness that delay patients’ ability to get up and start walking soon after surgery.

**Physical Therapy:** CJR participant hospitals are starting physical therapy sooner after surgery (e.g., the day of surgery). Performing surgeries earlier in the day, scheduling shifts so that therapists are available to provide physical therapy in the evenings and on weekends, and offering...
group therapy to maximize resources has enabled hospitals to provide physical therapy early during recovery.

**Pulmonary Embolism (PE) and Deep Vein Thrombosis (DVT) Prevention:** Several hospitals indicated that they are combining chemical and mechanical PE and DVT prophylaxis into standardized order sets.

Based on experiences shared by CJR participant hospitals, it can be beneficial to educate clinicians and staff about changes or standardizations to clinical protocols and implement supports that make adhering to the new protocols easier. Some hospitals have leveraged existing communication channels such as grand rounds, service line meetings, and in services to educate clinicians and staff about the new protocols. According to participant hospitals, easily accessible decision trees and programming standardized order sets into the electronic medical record are examples of supports that may increase adherence to the new protocols.
Risk Stratification

According to some CJR participant hospitals, categorizing patients according to their risk for adverse outcomes may help efficiently allocate resources towards customizing patient care plans and improving patient outcomes.

**TACTICS**

- Assess beneficiaries’ clinical, financial, and social risk factors
- Modify clinical protocols to enhance patient care based on risk assessments
- Optimize beneficiaries’ health prior to surgery

**TOOLS & RESOURCES**

- Nonelective Primary Total Hip Arthroplasty: The Effect of Discharge Destination on Postdischarge Outcomes
- Example Discharge Planning Assessment Tool
- Example Pre-operative Home Evaluation Screening Tool

There are a few validated, publicly-available risk assessment tools that CJR participant hospitals have reported using; however, most hospitals in the CJR Learning System sample indicated that they have combined or modified multiple tools, or created their own. Enlisting the help of surgeons, hospitalists, nurses, case managers, and quality improvement personnel has helped hospitals’ CJR teams identify the most important risk factors for which to screen their patients:

- **Clinical:** Anemia, poorly controlled comorbidities (e.g., diabetes, hypertension or sleep apnea), body mass index (BMI) greater than 40, anxiety, depression, pre-surgical functional status
- **Behavioral:** Smoking, alcohol dependence, narcotic abuse
- **Financial:** Inability to afford medications or medical supplies (e.g., walkers, canes) to support recovery
- **Socioeconomic:** Lack of support system, transportation barriers, and/or home environment

Typically, CJR participant hospitals have administered their tools starting two to four weeks prior to surgery in the surgeon’s office, at the joint class, or during a navigator phone call, then revisit as needed throughout the perioperative and recovery period. Some hospitals have noted that patients who score as high-risk may benefit from additional or different care management plans than the typical patient. For example, hospitals have found success:

- Optimizing high-risk patients’ health prior to surgery (e.g., instructing them to work with their other physicians to control their other conditions or losing weight);
- Assigning high-risk patients to navigators or increasing their contact with navigators; and
- Referring high-risk patients to community services that can help them overcome socioeconomic barriers to recovery.

Low-risk patients benefit from screening as well; according to hospitals, it provides an opportunity to start the discharge planning process prior to surgery.
Beneficiary and Caregiver Education and Engagement

Based on feedback from the CJR participant hospitals included in the Learning System sample, educating and engaging beneficiaries and their caregivers has helped to reduce their anxiety and set expectations so they feel empowered and prepared for their surgery and recovery.

**TACTICS**

- Implement patient portals to allow patients access to education information and care plan
- Conduct joint classes
- Develop a joint replacement handbook
- Incorporate caregivers into education and care planning
- Enlist care navigators to provide one-on-one education, support, and follow-up
- Enlist physicians to help set expectations and educate beneficiaries in the practice

**PATHWAYS TO CHANGE**

Participant hospitals have developed or intensified their strategies for educating and engaging beneficiaries and their caregivers to increase the hospitals’ chances of success under the CJR model. The primary enhancements have been to refine what information is communicated to beneficiaries and their caregivers:

- Encouraging beneficiaries to enlist a friend, family member, neighbor, church member, or community volunteer to serve as a coach or caregiver;
- Providing more detailed information about what care beneficiaries will receive, when, and by whom in the pre-operative, perioperative, and post-operative settings;
- Setting clear expectations around pain management (e.g., beneficiaries will still experience pain) and ambulation (e.g., beneficiaries will likely be getting up and walking the day of their surgery);
- Emphasizing that home – either with home health or outpatient therapy – is the preferred first post-operative discharge setting rather than an inpatient rehabilitation or skilled nursing facility when clinically appropriate;
- Sharing tips on how to make the transition to home easier (e.g., stocking the refrigerator with meals before surgery, arranging pet care, encouraging caregivers to take off of work the first few days the patient is home rather than or in addition to while they are in the hospital);
- Identifying the signs and symptoms of normal recovery, as well as potential complications; and
- Urging beneficiaries and their caregivers to call their care navigator or 24-hour nurse triage lines rather than going to the emergency room or calling 911 for non-emergent concerns.

Other enhancements participant hospitals have made under the CJR model include:

- Adding care navigators to be available for education, coaching, and triaging of recovery problems;
- Making it more convenient for beneficiaries to receive the education (e.g., offering joint classes more frequently, offering joint classes in the evenings, creating online versions of education materials, aligning the timing
of joint classes with beneficiaries’ pre-operative evaluations);  
• Delivering the education in more engaging ways (e.g., more interactive than didactic); and  
• Requiring beneficiaries and/or their caregivers to attend joint classes.

Participant hospitals are using a variety of methods to educate and engage beneficiaries including:

• Joint classes or camps;  
• Printed materials (e.g., joint handbooks, handouts, and presentations);  
• Videos;  
• EMR patient portals;  
• Patient engagement software programs; and  
• One-on-one discussions.

It is typically care navigators, surgeons, and their nursing staff who are having these conversations with patients; however, hospitals have discovered that it is vital for all members of the care team to communicate consistent messages to patients and their caregivers. A few hospitals have enlisted former joint replacement patients to provide this education during joint classes or at reunion/alumni events.
By identifying CJR beneficiaries before or at the beginning of the episode, CJR participant hospitals have been able to educate the patient on what to expect post-operatively; anticipate and address risk factors that may complicate the patient’s recovery; and follow the patient upon discharge to prevent unnecessary hospital readmissions.

**TACTICS**

- Adopt, configure, or upgrade technological tools to support identification and tracking of CJR beneficiaries
- Provide the beneficiary notification to qualifying patients
- Develop provider communication protocols for transitions of care

CJR participant hospitals have identified a variety of team members that are involved in identifying and tracking CJR beneficiaries throughout the episode, including physician office schedulers, care coordinators/navigators, case managers, registration/admissions departments, emergency room staff, and IT teams. To identify CJR beneficiaries and subsequently provide the beneficiary notification, CJR participant hospitals have employed various strategies:

- Asking physician's offices to notify the hospital when surgery is scheduled, after which the care coordinator can follow up with the patient to discuss joint replacement education, preoperative assessment, etc.
- Scanning operating room schedules for lower extremity joint replacements, then determining whether that patient is a CJR beneficiary
- Incorporating a flag within the electronic medical record that identifies CJR patients based on procedure and insurance status
- Working with the hospital’s IT department to develop regular reports that provide relevant information about CJR beneficiaries

Given the emergent nature of their injury, many hospitals have developed a separate process to identify fracture patients that fall into the CJR model. Hospitals have reported reviewing emergency department or operating room records each morning for the day prior; working with their hospital’s trauma coordinator to be notified about possible CJR beneficiaries; or implementing automatic pages when a potential CJR beneficiary is admitted.

In order to support patients during recovery and prevent complications/readmissions, CJR participant hospitals reported that they are tracking a variety of metrics that may impact a patient’s recovery or costs related to their care throughout the episode, including, but not limited to, discharge setting, patient progress, falls, drainage, infections, bowel movements, complications, emergency department visits or readmissions, and other psychosocial risk factors.
The intensity with which a patient is tracked by hospital staff usually depends on the patient’s risk factors and discharge disposition:

- Care coordinators/navigators reported that CJR patients discharged to a skilled nursing facility or other post-acute care facility generally require closer follow-up and coordination with post-acute care facility staff. This can be accomplished via sharing patient medical records; phone calls; forms that are completed by post-acute care facilities on a regular basis; or in-person visits by the care coordinator.
- Hospital staff are contacting patients that are discharged to home via phone; email; mail; or electronic platforms that facilitate patient education and engagement. Some hospitals are providing patients with a direct phone number to reach the care team in case issues arise during recovery.
- Generally, hospitals are following up with all CJR beneficiaries within 48-72 hours of discharge, then on a regular basis thereafter (e.g., 1 week, 2 weeks, 30 days, 60 days, and 90 days post-operatively) while customizing these touchpoints as needed, based on patients’ unique situations.

As part of these efforts to reduce readmissions, CJR participant hospitals have developed pathways for communication across providers and settings. Technological tools, such as electronic medical records that can be accessed by providers from different organizations or platforms/software that facilitate communication (e.g., secure text messaging), have been leveraged within these pathways. Some staff members are using simple spreadsheets to track patients internally, while patient-facing tools can be utilized to check in with patients and collect patient reported data.
Collaboration on Implementation of Clinical Protocols and Pathways

By engaging all individuals that are involved in direct patient care, care redesign efforts, and compliance with CJR model requirements, participant hospitals have been able to more seamlessly implement clinical protocols and pathways across settings.

TACTICS

- Share a comprehensive summary of the patient’s care
- Enlist the leadership and support of a “physician champion”
- Conduct interdisciplinary inpatient rounds
- Convene multi-disciplinary and inter-institutional workgroups or routine meetings
- Develop or enhance relationships with community partners to address health-related social needs
- Adopt, configure, or upgrade technological tools to support real-time sharing of beneficiaries’ health information between providers within and/or across settings
- Enlist care coordinators to facilitate communication across providers and settings

CJR participant hospitals have found that inviting clinicians from various disciplines (e.g., orthopedics, anesthesiology, trauma) to participate in workgroups can create an opportunity to gather input on implementation efforts under the model; improve communication related to clinical pathways; and provide a centralized place to discuss, standardize, and implement clinical protocols. Physician champions – physicians that are aligned with the goals of the CJR model and are respected among their peers – have been leveraged to bring other physicians and clinical staff on board with a hospital’s implementation efforts. Participant hospitals have noted that physicians are often competitive, entrepreneurial, and evidence-focused; to engage them, hospitals have found it beneficial to keep content concise, relevant, and pertinent, focusing on actual cases and data. Specifically, holding meetings at a time that does not disrupt physicians’ surgery schedule (i.e., early in the morning) was a nuance that several hospitals highlighted as a necessity. Allowing for rapid cycle improvement; encouraging surgeons to test protocols and bring their experiences back to the group; and reinforcing the message that they are responsible for not only their patients’ outcomes, but also the episode costs, have helped hospitals implement changes to clinical protocols.

Once stakeholders are engaged in care redesign, CJR participant hospitals have often used committees to make strategic decisions, while care coordinators have been charged with implementation, in tandem with physicians. Care coordinators have reported that they are usually responsible for managing communication across multiple providers and organizations throughout the pre-operative, inpatient, and 90-day post-operative periods. Some care coordinators focus primarily on patient navigation or care team coordination, or they may straddle both responsibilities simultaneously. Their activities may be formalized (e.g., regular huddles with care team members) or be more informal (e.g., phone calls to post-acute care facilities to check in on patients needing extra support).

A key activity reported by care coordinators is communicating with post-acute care facilities, including skilled nursing facilities, home health agencies, inpatient...
and outpatient rehab, and outpatient physical therapy. These interactions may include educating the post-acute care facilities around the goals of the CJR model and clinical protocol changes that the hospital may be requesting for CJR beneficiaries. The other piece of this collaboration, as shared by CJR participant hospitals, is ensuring that all members of the care team are aware of a patient’s care needs and status. To accomplish this, some hospitals have set-up processes to share patient information securely and efficiently with all members of the care team; several hospitals noted that they worked with their hospital’s IT department to develop these capabilities within their electronic medical record or interfaced directly with providers’ offices. Other hospitals have supplemented this with interdisciplinary inpatient rounds to keep staff up to date on patients’ progress. By engaging a cross-disciplinary group in the patient’s care, social risk factors (lack of transportation, inadequate nutrition, etc.) may surface; CJR participant hospitals have built relationships with community-based organizations to support their patients after discharge. Examples of agencies with which hospitals have partnered include those that provide transportation, meal preparation, and light housework.

13 See Disclaimer on the cover page of this document.
Encourage Collaboration

CJR participant hospitals have streamlined collaboration and aligned interests by encouraging physicians and post-acute care facilities to actively participate in care redesign efforts via sharing arrangements and/or preferred provider networks.

**TACTICS**

- Utilize sharing arrangements
- Establish preferred provider networks

**TOOLS & RESOURCES**

- Care Coordination and Management Series: Developing Community Partnerships
- Using Data to Drive Improvement: Part 1
- Using Data to Drive Improvement: Part 2

Some CJR participant hospitals have formally partnered with physicians who are engaged in care redesign and who furnish services to CJR beneficiaries during the episode via sharing arrangements. These arrangements have allowed physicians to share in payments received by the hospital from Medicare as a result of reduced episode spending, or internal cost savings, or both.

In terms of collaborating with post-acute care facilities, some participant hospitals have established preferred provider networks (PPN) with facilities that meet the hospital’s quality requirements as a way to encourage these facilities to improve the quality of the care they provide and to collaborate on clinical protocols and pathways. Hospitals share the list of facilities in these PPNs with patients while still maintaining absolute patient choice. CJR participant hospitals have identified the most highly-utilized and/or highest-quality post-acute care facilities. Subsequently, hospitals have encouraged these facilities to participate in their care redesign efforts, such as requesting that the facilities implement a certain protocol or share specific data with the hospital, if they want to be considered for inclusion in the PPN. To identify these post-acute care facilities, hospitals have found it helpful to review internal and/or publically-available data (e.g., CMS 3-star provider information, staffing metrics, readmission rates, emergency department visit rates, complication rates, and average length of stay). Some participant hospitals have ensured that their PPN provides options across their region, as some patients select their post-acute care facility based on locality.

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