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Safety-Net Hospital Experiences in a Bundled Payment Model

Lessons Learned for Providers and Payers

Evaluation of the CMS
Comprehensive Care for Joint Replacement (CJR) Model

December 2025

About the authors

Submitted by:

The Lewin Group

Amanda Markovitz, Project Director

In partnership with StoryPunch, GDIT, and Telligen

The Lewin Group, an independent contractor, analyzed claims and interview data for this evaluation study to understand safety-net hospital experiences in the CJR Model.

Authors:

Amanda Markovitz, Elvedin Bijelic, Cody Hopewell, Niklaus Julius, Amanda Christensen, Mary Beth Schaefer, Soumita Lahiri, Kassandra Fate, Ian Morrall, Christine LaRocca,[1] and Brianna Gass[1]

Prepared for:

Jessica McNeely, Research and Rapid-Cycle Evaluation Group (RREG), Center for Medicare and Medicaid Innovation (CMMI), Centers for Medicare & Medicaid Services (CMS)

This project was funded by the Centers for Medicare & Medicaid Services under contract no. HHSM-500-2014-00033I.

Acknowledgments:

The evaluation team would also like to recognize contributions from additional team members:

Juan Castro, Alice Chun, Colin Doyle, Lance Ford, Hannah LeManske, Maxwell Mindock, Kelly Olzenak, Stephen Poskitt, Carol Simon, Jennifer Weil, Becky Blystone,[1] Stacy-Ann Whitton,[1] Fatima Beltran,[1] Lindsay Kaatz,[1] Sam Ogunbo,[2] Xiaoyin Zhang,[2] Colleen Kummet,[2] Christopher Alleman,[2] Stephanie Shao,[2] Yan Qian[2]

[1] Telligen
[2] GDIT

This report describes the challenges faced by safety-net hospitals in the Comprehensive Care for Joint Replacement (CJR) Model and strategies they used to overcome these challenges. Readers of this report will learn about:

- The barriers safety-net hospitals faced in a bundled payment model
- Key strategies safety-net hospitals used to respond to the CJR Model and to address the needs of their patient populations
- How safety-net hospital experiences can inform broader payment policy and care delivery

Whether you are shaping health policy, implementing programs, or advocating for patient-centered health care solutions, this report will give you evidence and insights you can use to drive meaningful improvements in health care delivery.

Interested in learning more about the CJR Model?

In addition to this report, the following resources are available to get a quick snapshot of key findings or to dive deep into the Performance Year 7 evaluation:

- **Findings at a Glance | 2 pages**
  Concise visual summary of key findings
- **Executive Summary | 7 pages**
  Succinct overview of evaluation findings
- **In-Depth Report | 194 pages**
  Comprehensive evaluation findings and methodology
- **Drivers of Care Transformation | 36 pages**
  Report exploring how and why CJR hospitals transformed care

What's in this report . . .

Evolution and impact of the CJR Model

The Comprehensive Care for Joint Replacement (CJR) Model succeeded in reducing costs to Medicare and taxpayers and maintaining the quality of patient care for hip, knee, and ankle replacement surgeries since its start in 2016. These surgeries, also called lower extremity joint replacements (LEJRs), are among the most common procedures for people with Medicare and represent a high cost to the Medicare program.[1] Demand for LEJR surgeries will likely grow as the U.S. population ages,[2] further straining the Medicare program.

The Centers for Medicare & Medicaid Services (CMS) recognized the high volume and variation in cost and quality of LEJRs as an opportunity to enhance the value of care for these surgeries. The Center for Medicare and Medicaid Innovation (Innovation Center) designed the CJR Model to rein in spending and improve care coordination between the providers involved in the care for LEJR patients before, during, and after surgery. As a result, hospitals required to participate in the model became better attuned to cost drivers and ultimately helped lower Medicare expenditures for LEJR surgeries, especially spending on rehabilitative care. However, some hospitals faced greater hurdles than others to performing well in the model due to the communities they served and infrastructure factors beyond their control.

In this report, we summarize lessons learned from the CJR Model that may be useful for payers in crafting policies that work for providers in a variety of circumstances. Ensuring all providers have a chance to succeed in value-based care models, including providers who focus on populations with complex needs, can help spur competition and maintain patient choice in health care.

The CJR Model's payment methodology changed over time, leading to shifts in target prices.

CJR was a bundled payment model designed to improve care for Medicare patients undergoing hip, knee, and ankle replacements.[3] Bundled payment models provide a single target price that covers all services provided during an "episode." In CJR, participating hospitals were financially accountable for cost and quality during an episode of care that bundled all care received during a 90-day period following the patient's initial hospital stay or outpatient LEJR procedure.

1 Centers for Medicare & Medicaid Services. (2015). *Medicare program; Comprehensive Care for Joint Replacement payment model for acute care hospitals furnishing lower extremity joint replacement services.* https://www.federalregister.gov/documents/2015/11/24/2015-29438/medicare-program-comprehensive-care-for-joint-replacement-payment-model-for-acute-care-hospitals

2 Shichman, I., Roof, M., Askew, N., Nherera, L., Rozell, J. C., Seyler, T. M., & Schwarzkopf, R. (2023). Projections and epidemiology of primary hip and knee arthroplasty in Medicare patients to 2040-2060. *JB & JS Open Access, 8*(1), e22.00112.

3 Centers for Medicare & Medicaid Services. (2025). *Bundled payments*. https://www.cms.gov/priorities/innovation/key-concepts/bundled-payments

How did the CJR Model work?

Before a performance year, CMS gave hospitals a target price for each Medicare Severity-Diagnosis Related Group (MS-DRG) included in the model. Providers treating patients in CJR episodes of care were paid through existing Medicare payment systems during the performance year. After the performance year, CMS compared episode spending with the target price. Depending on the quality of care provided, hospitals earned an additional payment from CMS ("reconciliation payment") if spending fell below their target price or repaid a portion to CMS if spending exceeded the target price. This model structure was intended to lower spending while maintaining or improving the quality of care.

Setting appropriate target prices in bundled payment models is critical for CMS to achieve savings and reduce costs for taxpayers, to incentivize new behaviors that align with model goals, and to avoid unintentional financial harm to hospitals or patients. Target prices are based on benchmarks, an estimate of what care would cost in the absence of the model for a given hospital or region. CJR target prices included up to a 3% discount over expected episode spending to encourage efficiencies in care delivery.

Gradual shift to regional target pricing methodology

Initially, the model's target prices incorporated a blend of historical hospital-specific spending and average regional spending for LEJR episodes. The regional component of the blend grew over time, increasing to fully regional target pricing for Performance Years 4 through 8.[4] For hospitals with higher historical spending, the fully regional target prices that removed hospital-specific spending components were more challenging to meet. CMS also gradually raised the caps on reconciliation payments and repayments to Medicare during the model, so hospital opportunity and risk increased over time. CMS used a phased approach in shifting target prices and payment caps to allow time for hospitals to make the changes needed to be successful in the model.

Introduction of risk adjustments

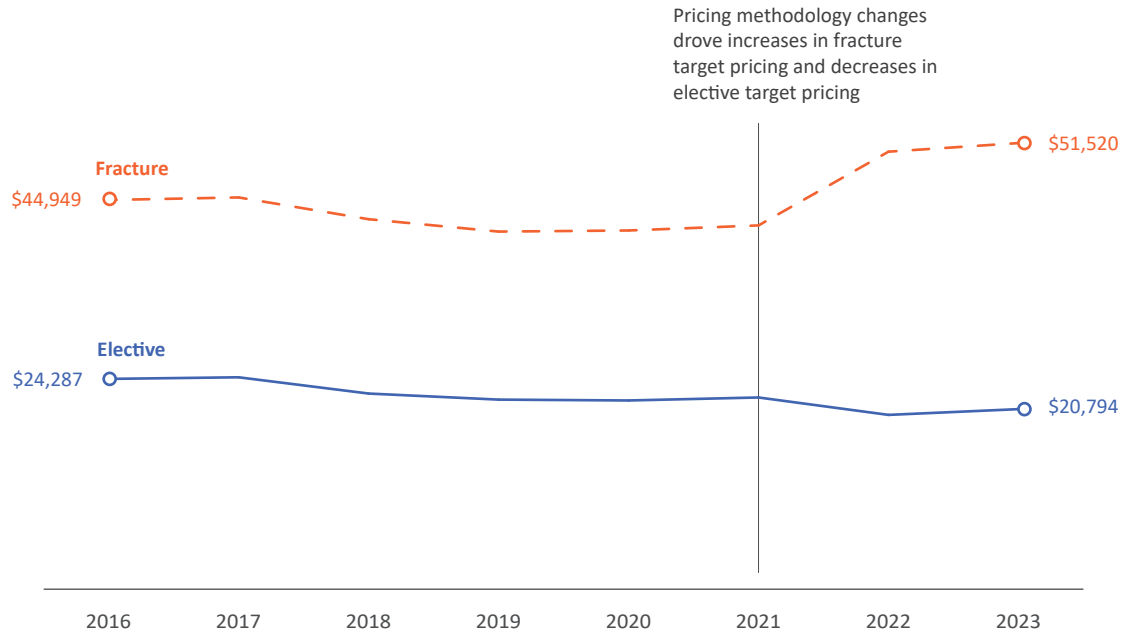
Since the beginning of the model, the target pricing methodology accounted for large differences in spending by providing separate prices by MS-DRG code and the presence or absence of a hip fracture—accounting for differences in spending by medical complexity and presence of major complications. Target prices reflected that higher-risk cases such as hip fractures were likely to have increased costs due to potential complications and the need for more intensive care after surgery.[5] In Performance Year 6, CMS introduced risk adjustments to account for patient factors,

4 Centers for Medicare & Medicaid Services. (2021). *Medicare program: Comprehensive Care for Joint Replacement Model three-year extension and changes to episode definition and pricing; Medicare and Medicaid programs; policies and regulatory revisions in response to the COVID-19 Public Health Emergency*. https://www.federalregister.gov/documents/2021/05/03/2021-09097/medicare-program-comprehensive-care-for-joint-replacement-model-three-year-extension-and-changes-to

5 In this report, the term "fractures" refers specifically to hip fractures, whereas elective LEJRs can include hip, knee, or ankle replacements.

including age, dual eligibility for Medicare and Medicaid, and chronic health conditions. These factors are associated with increased health care service use, leading to higher costs of care.

Target prices shifted over time with changes to the payment methodology. As the CJR Model moved toward fully regional target pricing between Performance Years 2 and 4, and target prices began to include nationwide payment reductions that occurred in early model years, hospitals' average target prices decreased—as illustrated in the figure below. The figure also shows how the updates to the target pricing in Performance Year 6 resulted in relatively higher target prices for more medically complex episodes, including fractures, and relatively lower target prices for the less complex elective procedures.



This figure excludes target prices for elective and hip fracture LEJRs with major comorbidities and complications, which generally account for less than 5% of all episodes.

The CJR payment methodology resulted in some hospitals that earned reconciliation payments and others that owed repayments.

In the first performance year, CMS waived downside risk, so no hospitals owed repayments to Medicare. Between Performance Years 2 and 4, during the gradual shift to regional target pricing, the proportion of hospitals that owed repayments grew from about a quarter to more than half of hospitals. In Performance Year 5, the proportion of hospitals that owed repayments dropped substantially due to temporary flexibilities related to the COVID-19 pandemic. The proportion of hospitals owing repayments increased with the pricing methodology changes

in Performance Year 6 and again in Performance Year 7, when about 60% of hospitals owed repayments to CMS—a larger proportion than in any prior performance year.

CMS anticipated that some CJR hospitals would receive reconciliation payments while others would owe repayments, based on their performance. The mandatory nature of the model was intended to encourage hospitals to adopt care transformation strategies and improve management practices. During the implementation of the model, CMS observed that a subset of hospitals—those serving a high proportion of patients dually eligible for Medicare and Medicaid or receiving the Medicare Part D low-income subsidy—tended to have comparatively lower financial performance. These hospitals, referred to as "safety-net hospitals," reported challenges in adapting to the model, citing limited resources and concerns that the CJR target prices did not fully reflect the complexity of their patient populations.

What is a "safety-net hospital"?

There is no single definition of a "safety-net hospital," and perceptions of what constitutes a safety-net hospital can vary across payers, providers, and patients. In common use, the term refers to hospitals that provide services to individuals regardless of their insurance or ability to pay. In research, safety-net hospitals are identified using metrics like the percentage of a hospital's patients who are dually eligible for Medicare and Medicaid, the amount of uncompensated care a hospital provides, or measures of neighborhood deprivation.

The analyses in this report used a definition based on the percentage of a hospital's patients who are dually eligible for Medicare and Medicaid or eligible for the Part D low-income subsidy,[6] one of the most frequently used measures to identify safety-net hospitals. We used this definition to be consistent with other studies. A hospital's safety-net status can shift from year to year depending on its patient population. In Performance Year 7, safety-net hospitals included those with a patient population that was at least 28% dually eligible or at least 29% eligible for the Medicare Part D low-income subsidy.

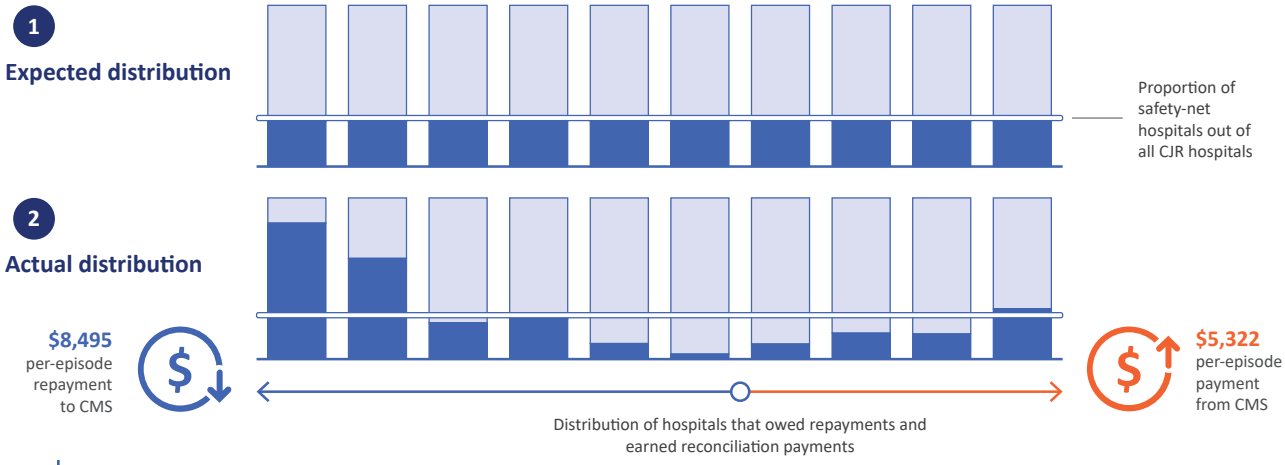
Even though all the hospitals selected for interviews met this definition, several did not consider themselves to be safety-net hospitals. This discrepancy highlights the challenges with defining safety-net hospitals and identifying the hospital and patient characteristics that may put participants at a disadvantage in redesigning care under health care payment and delivery models.

6 Centers for Medicare & Medicaid Services. (2022). *Person-centered innovation – an update on the implementation of the CMS Innovation Center's strategy – supplemental document*. https://www.cms.gov/priorities/innovation/media/document/cmmi-strategy-imp-update-tech

Safety-net hospitals were overrepresented among hospitals with the highest per-episode repayments to Medicare. This figure shows the distribution of safety-net hospitals across 10 groupings of CJR hospitals based on financial performance in Performance Year 7, from highest per-episode repayments to Medicare (left) to highest per-episode reconciliation payments from Medicare (right).

1 **Expected distribution |** If safety-net status did not affect performance, safety-net hospitals would have made up a little over a quarter of CJR hospitals across the groupings.

2 **Actual distribution |** However, safety-net hospital status negatively affected performance, with this group accounting for more than half of hospitals with the highest repayments to Medicare.



This report examines the experiences of safety-net hospitals participating in the CJR Model.

This report focuses on the operational and contextual factors that influenced safety-net hospital performance. Some hospitals received reconciliation payments because they had enough resources to invest in care redesign and had support from community organizations that helped meet patients' social and behavioral health needs. Others owed repayments, often because they lacked the internal capacity to implement changes, had limited access to external support, or treated too few LEJR cases to justify investing in new care processes. We synthesized findings from multiple analyses of qualitative and quantitative data to understand safety-net hospital experiences in the CJR Model. We conducted two rounds of interviews with CJR safety-net hospitals and analyzed safety-net hospital characteristics and performance in

the model. Interviews included hospitals that owed repayments to CMS in CJR and those that received large payments from CMS.

Understanding the specific factors that affected safety-net hospital performance in the CJR Model can help CMS identify hospitals that may require more flexibility or support in adapting to new models or payment policies. These factors may serve as more precise metrics than designations like "safety-net hospital," which might inadvertently include hospitals that do not require additional support to redesign care or exclude hospitals that do. Likewise, strategies that safety-net hospitals used to manage the complex needs of their patient populations could be useful for other hospitals facing similar challenges.

Characteristics of safety-net hospitals

Safety-net hospitals in the CJR Model differed from non-safety-net hospitals in some key ways. The differences in specific characteristics helped reveal what may have driven the variation in performance between these two groups of hospitals.

How the evaluation assessed safety-net hospital characteristics

We used descriptive analyses to compare all CJR safety-net hospitals with CJR non-safety-net hospitals, including their episode characteristics, target prices, reconciliation payments and repayments to CMS, and quality scores. These analyses focused on Performance Year 7, but we also examined some trends over time.

Safety-net hospitals performed fewer and more complex LEJR surgeries than non-safety-net hospitals.

32 vs. 140

LEJR episodes per hospital

Safety-net hospitals had lower LEJR episode volume on average than non-safety-net hospitals. Hospitals with fewer LEJR episodes may have had less of an incentive to make substantial changes to care. They also may not have had the volume to offset the impact of high-cost episodes. According to one safety-net hospital, the leadership team did not invest in a dedicated program to manage CJR patients, or attempt to pursue better reconciliation payments to potentially offset the costs of investing in the program, due to their low volume of eligible patients.

18% vs. 10%
Fracture episodes

Safety-net hospitals served a higher percentage of fracture patients than non-safety-net hospitals. For one of the interviewed safety-net hospitals, hip fractures made up 80% of its CJR cases, and in Performance Year 6, the hospital owed a repayment of nearly $250,000. Due to the emergent nature of fracture episodes, it was challenging for CJR hospitals to implement care redesign activities prior to these surgeries. With elective LEJRs, several key care redesign strategies, such as patient optimization and patient and caregiver education, occurred prior to surgery. Patients with fractures who were not optimized prior to surgery were also more likely to have complications or readmissions after surgery that could lead to exceptionally high-cost ("bundle busting") episodes.

Although fracture episodes had a higher target price than elective episodes, these factors still created additional risk in achieving the target price. Hospitals that performed a higher proportion of fracture episodes had fewer easily managed elective episodes in their case mix, which may have made it more difficult to earn a reconciliation payment. The higher proportion of fracture episodes for safety-net hospitals may relate to the complexity of their patient populations, which tend to have substantial medical and nonmedical needs.

69% vs. 77%
Outpatient elective episodes

Safety-net hospitals performed a lower percentage of outpatient LEJRs than non-safety-net hospitals. Outpatient LEJRs tend to be less invasive and intensive than inpatient LEJRs due to differences in the outpatient and inpatient patient populations. Outpatient LEJR patients are often healthier and have family or other caregivers to help support a same-day discharge.

Case complexity and other factors may have limited safety-net hospitals' opportunity to perform outpatient LEJRs. One safety-net hospital said that outpatient LEJR surgeries were dangerous and unreasonable for its population due to risks associated with its patients' home environments, described as typically small and confined with stairs. These challenges made it difficult to accommodate the equipment required for patients to safely navigate their home environment after surgery. Such nonmedical risk factors in many cases cannot be mitigated by the hospital.

Safety-net hospitals served higher-need patients.

Safety-net hospitals often served patient populations with substantial medical needs, including chronic conditions, as well as nonmedical needs that could have affected patients' ability to manage their health and treatment.

For instance, based on our sample criteria, CJR safety-net hospitals had a higher percentage of patients who were dually eligible for Medicare and Medicaid than non-safety-net hospitals (29% vs. 5%). Staff at one safety-net hospital reported that about 60% of its patients undergoing CJR LEJR surgeries were dually eligible. These individuals tend to have lower incomes and worse health than people who have Medicare but not Medicaid.[7] CJR safety-net hospitals also served patients with higher average Hierarchical Condition Category (HCC) scores (1.7 vs. 1.5), a predictor of health care costs used for risk adjustment.[8] These scores account for demographic factors, such as age and sex, as well as health factors, such as chronic conditions, to measure disease burden. The HCC score for a patient with average health is 1.0, with healthier-than-average patients scoring below 1.0 and less healthy patients scoring above 1.0.

In interviews, safety-net hospitals described how specific patient factors made it difficult to provide high-quality care:

- Comorbidities were associated with complications that led to higher use of resources and a longer recovery. For example, patients with diabetes receiving LEJR surgery may have been at an increased risk of complications such as pneumonia and urinary tract infection.[9]
- Lack of health literacy and insufficient caregiver or family support created challenges with adhering to care plans, which increased the risk for unplanned readmissions. Discharging patients directly home was also difficult without a caregiver to take them to physical therapy or cook them meals.
- Housing insecurity, housing safety challenges such as stairs and narrow hallways, and limited access to transportation all hindered safe discharge. As one interviewee described, "often a Medicare patient may be still renting a single room in somebody's house," posing challenges for home recovery.

Some providers helped address housing, transportation, or related issues by leaning on internal hospital supports and external community resources. However, other hospitals might not have had the internal resources necessary to track and refer patients to services. Resources available in their community, including food pantries, public transportation, and services from the public health department, might have been limited.

7 Peña, M. T., Mohamed, M., Burns, A., Fuglesten Biniek, J., Ochieng, N., & Chidambaram, P. (2023). *A profile of Medicare-Medicaid enrollees (dual eligibles)*. Kaiser Family Foundation. https://www.kff.org/medicare/issue-brief/a-profile-of-medicare-medicaid-enrollees-dual-eligibles/

8 Pope, G. C., Kautter, J., Ellis, R. P., Ash, A. S., Ayanian, J. Z., Lezzoni, L. I., Ingber, M. J., Levy, J. M., & Robst, J. (2004). Risk adjustment of Medicare capitation payments using the CMS-HCC model. *Health Care Financing Review, 25*(4), 119–141.

9 Bolognesi, M. P., Marchant, M. H., Jr, Viens, N. A., Cook, C., Pietrobon, R., & Vail, T. P. (2008). The impact of diabetes on perioperative patient outcomes after total hip and total knee arthroplasty in the United States. *The Journal of Arthroplasty, 23*(6 Suppl 1), 92–98.

Common strategies CJR hospitals used to reduce costs while preserving quality of care

In general, most CJR Model hospitals used similar strategies to lower the cost of care and improve care coordination for LEJR episodes. As described in the CJR Drivers of Care Transformation report, hospitals in the model increased patient education and optimization before surgery; got patients to walk or start physical therapy sooner after surgery, often on the same day; and sent more patients home to recover instead of to costly post-acute care facilities.[10] CJR hospitals frequently reported these strategies in interviews and surveys over the course of the evaluation. For instance, 92% of surveyed CJR hospitals implemented pain management practices that allowed for early patient mobility, and 53% of respondents said the CJR Model influenced their decision to implement this practice.

CJR hospitals used activities before, during, and after the surgical stay to redesign care for LEJR patients.

Before surgical stay

- Engaged patients well before the hospital admission to begin discharge planning
- Provided patient education
- Identified high-risk patients for patient optimization to facilitate safe discharge home and optimize patient outcomes

During surgical stay

- Used early ambulation and changes to pain management and physical therapy to reduce length of stay, facilitate safe discharge home, and improve quality

After surgical stay

- Increased coordination and communication with post-acute care providers
- Created preferred post-acute care networks
- Used longer period of patient follow-up to reduce length of stay in skilled nursing facilities and mitigate risk of readmissions

Successful safety-net hospitals used many of these same approaches to care for their LEJR patients, but interviewees described additional considerations for care planning and delivery given the key challenges they faced. For example, fracture patients with comorbidities could not be optimized before surgery. Since safety-net hospitals saw a higher percentage of fracture patients, they may have had fewer opportunities to redesign care before surgery.

10 The Lewin Group. (2024). *Drivers of care transformation. Cumulative findings from the Comprehensive Care for Joint Replacement (CJR) Model evaluation.* Prepared for the Centers for Medicare & Medicaid Services. https://www.cms.gov/priorities/innovation/data-and-reports/2024/cjr-py6-ar-drivers-transformation

Many safety-net hospital patients also had nonmedical needs that could have affected their treatment and recovery process. Their housing may not have been suitable for LEJR recovery due to stairs or narrow hallways, or they may not have had family or caregiver support to facilitate safe discharge home. To address these challenges, safety-net hospitals reported making efforts to support their unique patient populations throughout the LEJR care pathway. These activities were often in response to community needs rather than CJR participation, but they may have helped some safety-net hospitals control costs and improve quality of care under the model.

In addition to the common CJR strategies described above, safety-net hospitals reported the need for additional activities to support their patients with substantial medical and nonmedical needs.

Before surgical stay

- Engaged patients well before the hospital admission to begin discharge planning
- Provided patient education
- Identified high-risk patients for patient optimization to facilitate safe discharge home and optimize patient outcomes

★ Screened elective LEJR patients to identify unmet nonmedical needs, referred patients with such needs to social workers or nurse navigators

During surgical stay

- Used early ambulation and changes to pain management and physical therapy to reduce length of stay, facilitate safe discharge home, and improve quality

★ Implemented programs and processes to improve care and outcomes for fracture patients with comorbidities

After surgical stay

- Increased coordination and communication with post-acute care providers
- Created preferred post-acute care networks
- Used longer period of patient follow-up to reduce length of stay in skilled nursing facilities and mitigate risk of readmissions

★ Connected patients to hospital and community resources, such as food banks and housing assistance, to address unmet nonmedical needs

Before surgery, safety-net hospitals screened patients for needs related to housing, transportation, and food security and referred them to social workers or case managers, who connected patients to hospital or community resources. They employed staff who speak other languages to help meet the specific needs of their community. **During the surgical stay**, safety-net hospitals leveraged small teams to create care plans and communicate frequently about patient status. They also started programs aimed at improving care and outcomes for fracture patients with comorbidities who could not be optimized before surgery. **After surgery**, safety-net hospitals continued efforts to connect patients to resources to address their medical and nonmedical needs. Hospitals referred patients to affordable home health options or even to hotels if their own home was not safe for their recovery. The next section dives deeper into these and other strategies that safety-net hospitals used to support their patient populations.

Tailored strategies safety-net hospitals used to care for patients with substantial medical and nonmedical needs

In our interviews with CJR safety-net hospitals, we learned about the strategies they used to deliver LEJR care while meeting the unique needs of their patients. Although their performance in the model varied, safety-net hospitals generally reported that the CJR Model led to changes in LEJR care, including hiring care coordinators and setting care team expectations. Safety-net hospitals also reported leveraging existing hospital-wide programs implemented in response to the specific needs of their complex patient populations, such as screening patients for unmet nonmedical needs and referring them to community resources. Overall, these hospitals took a whole-person approach to care that considered an individual's physical, mental, and social needs.

How the evaluation assessed safety-net hospital care redesign

We interviewed 94 people at 19 CJR safety-net hospitals to understand their experiences in the model and their approaches to care for LEJR patients. Typically, we spoke with four to six interviewees at each hospital, including LEJR service-line coordinators, nurse navigators, social workers, value-based care managers, and hospital executives. Five of the safety-net hospitals were top-performing hospitals in that they earned high reconciliation payments (in the top 30% of payments in the CJR Model).

The interviews took place in two rounds, first in November 2023 and next in October and November 2024. They consisted of two 45-minute sessions or one 60–75-minute interview. Key topics included in the interviews were safety-net hospital status and patient population, screening for unmet nonmedical needs and the impact of those needs on care for LEJR patients, use of community resources to address unmet nonmedical needs, and key strategies used to achieve success in the CJR Model.

Hospitals set care expectations for staff and improved communication between providers in response to the model.

Investing in staff was a key strategy made in response to the CJR Model. Some safety-net hospitals hired care coordinators to follow patients closely in the 90-day episode, an approach reported across CJR participants. Safety-net hospitals also hired nurse navigators specifically to address nonmedical needs identified for CJR patients.

Safety-net hospitals took steps to set care team expectations around patients' nonmedical needs. At one hospital, training in screening for nonmedical needs was mandatory for all staff to foster a community-based approach to assessing and addressing social needs.

Communication across care teams was important for patients with unmet nonmedical needs, and the case management or social work team played a significant role in caring for these patients. Some hospitals convened small teams to create a plan to support the patient and discuss barriers to proceeding with surgery and with postsurgical care. Ensuring effective communication across the care team and frequent checkpoints allowed providers to respond to issues quickly throughout the treatment episode.

> **"Every patient has multiple checkpoints . . . it's never really not known what the patient's situation is."**
>
> – Joint Replacement Nurse Practitioner

Larger hospitals may have had more resources to support investments, but small hospitals may have benefited from close collaboration and communication between providers. One safety-net hospital cited its small size as a reason it was successful at addressing patients' unmet nonmedical needs. Hospital staff were in frequent communication, so they could set expectations with each other and with patients. This hospital reported meeting monthly to review patients, and the orthopedic service-line director reviewed patients in real time. If an issue arose, staff were in communication to determine how to correct it.

Innovation spotlight

Multidisciplinary rounding

Challenge. Fracture patients could face several additional medical and nonmedical challenges beyond their LEJR surgery that required a multidisciplinary approach to care.

Innovation. One safety-net hospital instituted multidisciplinary rounding on the trauma team specifically to lower spending for fracture patients in the CJR Model. Once the patient was admitted and screened, the care team, including social workers, surgeons, residents, physical therapists, and trauma attendings, met to discuss the case. The goal was to review medical and social issues outside of the hip fracture that could be present. These meetings could lead to connections to outside resources.

Outcome. According to the hospital, this multidisciplinary rounding was the most important strategy that led to success in the CJR Model.

Hospitals screened patients for unmet nonmedical needs.

Hospitals often embedded standardized screening questionnaires to assess patients' unmet nonmedical needs in their electronic medical record. Once a need was identified, the protocol was to refer patients to the appropriate staff, typically social workers. Hospitals noted that maintaining the screening results in the electronic medical record made it easy to keep the entire care team aware of the patient's needs. Interoperability between teams was an issue if the surgeon was not a hospital employee and made it more challenging for the surgeon to access the electronic medical record. In these cases, the hospital used multiple platforms to ensure the entire care team had the same information.

One safety-net hospital's screening protocol assessed 11 areas of need: food insecurity, physical activity, social connections, depression, alcohol use, tobacco use, financial resource strain, housing stability, transportation needs, intimate partner violence, and stress. The screening was integrated into the hospital's electronic medical record and conducted at all points of entry into the network. The hospital also described how its health care network assessed nonmedical needs at the community level. The health care network analyzed publicly available data using patient ZIP Codes to identify the top five social needs of the population, examining factors such as language dominance and income by geography. Other safety-net hospitals also reported assessing community needs to better understand and serve their patient population.

Innovation spotlight

Screening, tracking, and "closing the loop"

Challenge. Many hospitals screened patients for unmet nonmedical needs, but once a need was identified, tracking the status of patients and "closing the loop" for them was sometimes difficult.

Innovation. One hospital used a visual indicator in its electronic medical record system that identified which patients had been screened (green) or not screened (red) for unmet nonmedical needs. This hospital created a "hub" of staff that supported patients with complex needs, as identified in the initial screening. The hub then conducted another full screening and "opened an episode" until the patient's needs were addressed—for example, helping a patient keep their utilities on so that they could refrigerate their diabetes medications.

Outcome. The hub allowed the hospital to track the status of patients with unmet needs, document whether each patient's needs had been addressed, and "closed the episode" when they were complete.

Screening differed for elective and fracture LEJR surgeries. For elective LEJRs, hospitals screened patients during registration or at the first preoperative appointment. For fracture LEJRs, hospitals screened patients within 24 hours of admission or after the surgery.

> **"Our goal is to screen as close to 100% of our discharges as possible."**
>
> – Vice President of Population Health

Even though universal screening for medical and nonmedical needs was becoming routine, there were barriers to gathering accurate information. Patient mistrust in the purpose of screening and use of screening results made it hard for hospitals and other organizations to provide the appropriate support. Safety-net hospitals reported that some patients were hesitant to share this information because they did not understand why the hospital needed it or did not want to admit that they needed help. Patients were often more reticent to share needs over the phone. The recovery coach, typically a family member or friend who supported the patient during the LEJR process, tended to be more forthcoming about the patient's needs than the patient.

Evaluations of other models have raised similar issues with patient hesitation in the screening process and identified strategies to improve receptiveness.[11] For instance, considering the timing and location of screening is important—it may be best to avoid screening patients while they are in the emergency room or waiting on critical care. In addition, having navigators perform screenings rather than clinicians may help build trust with patients.

Hospitals referred patients to dedicated hospital staff or community resources.

Safety-net hospitals used a range of approaches to assist patients facing barriers to care. In some cases, hospitals addressed patient needs with their own resources; in other cases, they referred patients to community resources for support.

Hospital resources

Hospitals gave examples of how they used internal resources to support their patients:

- Contracted with an ambulance service to transport patients who were physically unable to take a bus or train to receive care
- Used the health system's ride-share service to drive patients to appointments
- Provided a one-time payment for patients facing eviction
- Connected patients to a registered dietitian to address issues with food security as well as dietary considerations related to obesity, diabetes, and hypertension

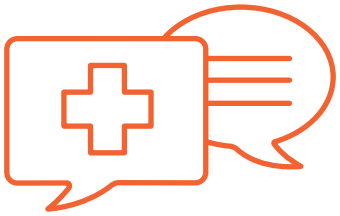
11 RTI International. (2024). ***Accountable Health Communities (AHC) Model evaluation. Third evaluation report***. Prepared for the Centers for Medicare & Medicaid Services. https://www.cms.gov/priorities/innovation/data-and-reports/2024/ahc-3rd-eval-report

One safety-net hospital described how it had the experience and resources to help care for these patients. The hospital had a program that helped advocate for patients and connected them to Social Security, Supplemental Security, disability, or retirement benefits, as well as legal support for the benefit appeal process. Through the health system, this hospital also had access to recuperative care and enhanced residential care for patients who were unhoused and needed a place to recover.

> **"We're really good at it [addressing unmet nonmedical needs] because we've been doing it. Our hospital was built to take care of and serve these patients."**
>
> – Orthopedic Surgeon

Another safety-net hospital opened a dedicated clinic for underinsured patients that provided primary care services and referrals to address unmet nonmedical needs. The clinic has allowed the hospital to integrate the assessment and management of unmet nonmedical needs into its standard practice across service lines, including orthopedics. Providers referred patients who scored high on the risk assessment to a social work case management team that linked patients to community resources.

In addition to nonmedical needs, several hospitals described challenges with managing LEJR patients' chronic conditions. They cited that particularly in fracture cases, they lacked time before surgery to optimize patients with comorbidities like diabetes. While all CJR participants faced this issue, it may have been more of a burden on safety-net hospitals since they tended to have a higher percentage of fracture episodes and sicker patients.



Innovation spotlight

Co-managing fracture care

Challenge. Some safety-net hospitals had a high percentage of fracture cases, and undiagnosed or unmanaged comorbidities complicated the care for these patients.

Innovation. One hospital that saw a large proportion of hip fractures started a hip fracture co-management program that addressed needs beyond orthopedic care. The hospital admitted LEJR patients with comorbidities to the medical or trauma department, and the orthopedic department served as a consulting service. With the medical department managing the patient's care, other underlying medical issues that may have been a precursor to the fracture, such as undiagnosed diabetes or cardiac issues, could be addressed alongside the patient's surgery.

Outcome. The hospital reported that this program reduced unplanned readmissions, decreased emergency room visits, and streamlined the process of getting patients from the emergency room to the operating room to rehabilitation.

Community resources

Most of the safety-net hospitals connected patients with community resources when they identified unmet needs. Several hospitals gave patients a list of resources specific to their needs, but most had social workers or nursing staff at the hospital who helped with linking patients to community organizations. A few hospitals had a partnership or relationship with community organizations, such as food banks or local public health departments. One hospital that partnered with a community food bank had fresh produce delivered regularly to the hospital to ensure patients had access to healthy food. Another hospital housed an information desk for the county health department in its lobby. Health department staff at the information desk supported patients with housing, medication assistance, and other social services.

Safety-net hospitals noted some challenges with making connections to community organizations. Many hospitals, regardless of safety-net status, do not have adequate resources in their community to address patient needs.[12] The safety-net hospitals interviewed said that community resources such as housing supports sometimes had strict eligibility criteria or long wait times, or they were inadequate to address certain needs, such as behavioral health conditions. One hospital noted that patients frequently asked for counseling services and peer support during assessments but that it faced a large unmet need for mental and behavioral health support network wide. Another hospital described how some patients were hesitant to use available resources, such as homeless shelters.

> **"We can provide the resources, but they have to be willing to utilize them . . . We can get them [to shelters], but that doesn't mean they're going to stay there."**
>
> – Director of Case Management

Safety-net hospitals used tools and dedicated staff to track the status of patients referred to these services and "close the loop." In some cases, shared access to the medical record allowed community organizations to update the status of a particular patient. One hospital used an external vendor, Unite Us, as a care management platform that tracked the needs identified in assessments, the resources offered to address those needs, and whether the patient accessed the resources. Hospitals also described internal teams that were assigned to monitor patient follow-up and access to referred services.

12 Johnson, K. A., Barolin, N., Ogbue, C., & Verlander, K. (2022). Lessons from five years of the CMS Accountable Health Communities Model. *Health Affairs Forefront.* https://www.healthaffairs.org/content/forefront/lessons-five-years-cms-accountable-health-communities-model

Factors such as housing and availability of caregiver support were important to consider in patient discharge planning.

Safely discharging patients directly home after surgery, with or without home health services, was a key strategy that CJR participants used to cut costs under the model. One safety-net hospital noted that making money in the model was not possible without sending patients home to recover.

> **"At this point in the CJR [Model], if your patients are going anywhere except for home . . . you're not going to make money in the model."**
>
> – Hospital System Executive

For safety-net hospitals, this option was not always available because many of their patients faced housing insecurity or other needs that prevented discharge home. Shortening stays in post-acute care facilities was also difficult for their patients, who tended to be sicker and had fewer social supports than patients at non-safety-net hospitals. Although CJR target prices accounted for certain factors that affect risk, it may not have been possible to capture all aspects of a patient's circumstances influencing treatment and rehabilitation.

Housing

Housing accessibility and housing insecurity were common concerns. Some patients' living situations were not favorable for recovery from an LEJR surgery. If patients lived on the upper floor of a building without an elevator, for instance, they may not have been able to navigate the stairs and might have been better off recovering in a skilled nursing facility after surgery. One hospital described the case of a 79-year-old woman who lived in a small fourth-floor walk-up apartment. She lived alone and was fairly independent, but the hospital said sending her home after her LEJR for recovery was not practical. Another hospital noted that home health agencies have refused to accept certain payers accepted by the hospital, which posed challenges to safely discharging patients directly to home. One hospital referred patients to a hotel if their home situation was not conducive to recovery, sending home health to the hotel in some cases.

Homelessness created substantial barriers to recovery after surgery. Even though rehabilitation in a post-acute care facility may have been the safest choice for patients experiencing homelessness, multiple hospitals noted that skilled nursing facilities may not have accepted these patients. One hospital described how some patients were "basically boarders" in its facilities because they were uninsured and had no safe place to discharge. While the patients may have needed to recover in a post-acute care institution, skilled nursing facilities might not have taken them because they were homeless and lacked insurance coverage. Hospital staff tried to help the patients obtain insurance coverage, if possible. Another hospital noted that

homelessness put patients at risk for complications such as infection. This hospital had access to a county coalition that offered support to people who were homeless, including assistance applying for insurance benefits.

Culture and language

Safety-net hospitals discussed how the culture and language of LEJR patients were important to consider in their care, including discharge planning. One hospital described how it served many Vietnamese patients who were reluctant to receive care from outside the Vietnamese community. The hospital said it worked to partner with agencies that had Vietnamese-speaking staff and informed these organizations about the needs of the population. As a result, home health agencies in the area hired Vietnamese-speaking liaisons and nurses. One hospital realized it was having trouble identifying barriers to discharge during discharge planning with its Spanish-speaking patients and decided to hire a joint replacement coordinator who was bilingual. Another hospital also discussed cultural considerations in discharge planning for its Latino population. The hospital stated that in the Latino culture, "you really don't put mom, dad, or your family members anywhere," noting the relatives were very particular about where their family members were placed. However, discharging patients directly home was a challenge if they were staying with family members who were at work during the day or if their caregiver was an elderly spouse who could not provide the support that the patient needed.

In short, nonmedical needs likely led to longer hospital stays or discharges to post-acute care facilities rather than directly home. Therefore, these needs are inherently linked to recovery outcomes.

> **"Rehabilitation is just as important as the surgery going well."**
>
> – Orthopedic Surgeon

Lessons learned from safety-net hospitals and broad implications for value-based payment models

Payers and providers have a unique opportunity to learn from the CJR Model because of its mandatory, randomized design and tenure of more than 8 years. By examining safety-net hospital experiences in the CJR Model, we can glean considerations for target pricing, participant needs, and success factors across hospitals to maintain competition and patient choice in future value-based payment models.

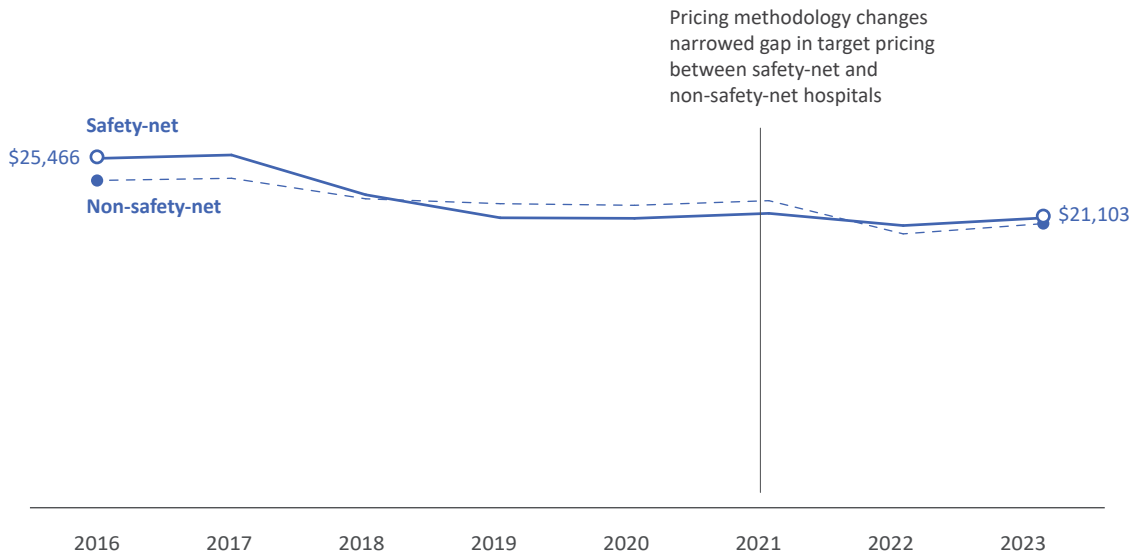
Target prices that adequately account for patient risk are important for hospital performance.

CMS built into the CJR Model's design a gradual shift from target pricing based on a blend of historical hospital-specific and regional spending to fully regional target pricing. At the model's start, when target prices still accounted for historical spending, safety-net hospitals had higher target prices on average than non-safety-net hospitals for elective and fracture episodes. That is, safety-net hospitals tended to have more leeway in meeting payment thresholds. The ramp up to fully regional target pricing between Performance Years 2 and 4 was meant to give hospitals time to come into alignment and be successful in the model. However, this change had a greater impact on safety-net hospitals than on non-safety-net hospitals. By Performance Years 4 and 5, the earlier trend had flipped—non-safety-net hospitals had higher target prices on average than safety-net hospitals, because safety-net hospitals were more prevalent in regions with lower target prices for elective LEJRs. When CMS added the new patient-level risk adjustments in Performance Years 6 and 7, the gap between target prices for safety-net and non-safety-net hospitals narrowed.

We heard from safety-net hospitals that the regional target pricing was still a challenge toward the end of the model. They felt that the additional risk adjustments had no clear impact on their performance in the model and were not enough to offset internal increases in costs. Indeed, safety-net hospitals continued to be overrepresented among CJR hospitals with the highest repayments to Medicare in Performance Year 7, as described earlier. One hospital noted the difficulty with continuing to lower spending over time while maintaining quality.

> **"On a dime, the target price could just be switched, and we've already done so much for the program. We are wondering . . . where else we're going to be able to squeeze."**
>
> – Manager of Government Programs

The target prices for safety-net and non-safety-net hospitals shifted with changes to payment policy. As CMS shifted the CJR Model toward fully regional target pricing between Performance Years 2 and 4, average target prices decreased more for safety-net hospitals than for non-safety-net hospitals. The addition of patient-level risk adjustments in Performance Year 6 narrowed the gap in target prices between safety-net and non-safety-net hospitals.



This figure only shows the target prices for elective LEJRs without major comorbidities and complications.

Hospitals may have limited control over spending in the post-discharge period.

In the CJR Model, hospitals were held financially accountable for Medicare payments throughout an episode of care, including the 90-day period after patients left the hospital. When held accountable for the costs of rehabilitation, hospitals sent more people home after LEJR surgery and coordinated closely with post-acute care facilities to shorten their length of stay.

These changes to the care pathway were harder to implement for safety-net hospitals. Safety-net hospitals said they had trouble working with post-acute care providers to control costs in the CJR Model. Some hospitals felt they could not influence skilled nursing facility behavior because they had low volume. They often had to send their patients with substantial medical and nonmedical needs to a post-acute care facility, and the high cost of some cases in the post-discharge period—referred to as "bundle busters"—could have ruined the hospital's financial performance for the year.

High spending after the end of the episode also affected safety-net hospitals more than non-safety-net hospitals. Under the CJR Model, CMS recouped exceptionally high costs that

occurred after the 90-day post-discharge period to discourage participants from shifting costs outside of the episode, and safety-net hospitals faced these recoupments at twice the rate of non-safety-net hospitals. However, recoupments for high post-episode spending accounted for a small portion of total hospital repayments.

When asked about their suggestions on possible model refinements, interviewed safety-net hospitals commonly suggested that shortening the episode length or limiting the downside risk for complex patients would have helped improve their financial performance in the model. They also expressed a desire to hold post-acute care providers accountable for costs. If a post-acute care facility kept a patient for a longer period than recommended by the hospital, the hospital was ultimately responsible for the costs of the extra care. One interviewee noted that the accountability should have been shared because multiple providers were involved in treating LEJR patients.

> **[The] hospital ends up taking the brunt of the penalties, when in reality, these surgeries take a village.**
>
> – Vice President of Quality and Risk Management

Lessons learned from safety-net hospital experiences can inform broader payment policies and benefit all hospitals facing similar challenges.

There is no single definition of a "safety-net hospital," which can pose challenges for designing payment policies that account for factors outside of a hospital's control, such as their patient mix. Using an imprecise definition may inadvertently result in CMS paying additional taxpayer dollars to hospitals that do not need it to be successful in a value-based model.

This report offers insights into the specific barriers to lowering costs and improving quality of care for safety-net hospitals in the CJR Model, as well as strategies to overcome these challenges. Understanding these barriers and success factors can help policymakers craft payment policies that offer the appropriate support to hospitals that need it and can give hospitals facing similar challenges a road map for success.

CJR safety-net hospitals recommended a holistic approach to respond to episode-based payment models.

Interviewees offered advice for other safety-net hospitals participating in episode-based payment models to maximize their financial and quality performance. The advice reflects the care design strategies proven to aid performance across all types of hospitals in the CJR Model. In general, succeeding in episode-based payment models requires a multifaceted approach.

Improving the patient care journey

Hospitals suggested using care navigators to support the patient throughout the episode of care. They also discussed the importance of optimizing patients for surgery to improve their outcomes and recovery. In particular, they said hospitals should consider the needs of patients with chronic comorbid conditions, such as diabetes and obesity, in planning the care pathway.

Fostering relationships with post-acute care providers

Hospitals highlighted the need to coordinate effectively with post-acute care facilities to monitor care during the recovery period. Hospitals also suggested creating networks of preferred post-acute care providers to increase the use of high-quality rehabilitative care and reduce the length of patient stays in post-acute care facilities.

Understanding hospital performance at the beginning of a model

Interviewees described the importance of understanding how the hospital is performing when a model starts. They advised that future model participants use baseline data to uncover what is driving expenditures. In the CJR Model, CMS provided 3-year baseline cost data, and this information was helpful for hospitals in identifying opportunities for improvement. One interviewee also emphasized the value of understanding the unique needs of the hospital's patient population in transforming care.

Top-performing safety-net hospital strategies for success in CJR

Top-performing hospitals attributed their success in the CJR Model and in serving their unique patient populations to several key strategies centered around whole-person care:

- **Screening for patient needs:** creating a centralized team that supports patient screening and is responsible for follow-up, using electronic medical record and other customized dashboards in programs such as Tableau® to track screening status, engaging the patient as well as caregiver or recovery coach in preoperative discussions to glean information about the patient's situation
- **Addressing patient needs:** investing in a case management team, referring patients to social workers or other dedicated staff, using tools such as patient engagement platforms for preoperative education and care navigator communication, leveraging community and hospital resources, including those in place for Medicaid patients

Safety-net hospitals needed key resources to succeed in the CJR Model.

Safety-net hospitals identified resources they needed to provide high-quality, whole-person care for patients with substantial medical and nonmedical needs in the CJR Model, including internal support from the hospital or health system and external support from CMS.

Investments in staffing and infrastructure

Many of the safety-net hospitals highlighted the need to hire or engage staff with the CJR Model, including nurse navigators who could follow the patient after discharge. Hospitals with low CJR LEJR volume could not justify investments in staff dedicated to the program.

Some hospitals did not have the funds to hire more staff or offer competitive pay. In one case, a hospital used grant funds to hire additional staff that allowed the care management team to focus on unmet nonmedical needs.

Leadership support was critical in a hospital's ability to invest in staff and infrastructure to address patients' unmet nonmedical needs. Resources such as CJR Model administration and data analysis support were important for success. One safety-net hospital felt that it lacked the required financial support to perform well in the model because it was a small hospital that was not part of a health system.

Some of the safety-net hospitals noted that more external support from CMS could have improved their financial performance in the model:

- Target prices that reflected the challenges of treating their patient population
- A grant or up-front payment to invest in key staff, such as a nurse navigator who could have helped address the unmet nonmedical needs of CJR patients
- More opportunities to learn from peer hospitals to help in responding to the model

Shared patient accountability

Safety-net hospitals also said they had trouble working with post-acute care facilities, which did not have financial accountability in the CJR Model, to shorten stays and control costs in the recovery period. They suggested that financial accountability or shared savings for post-acute care providers could have provided an incentive for more timely discharge from skilled nursing facilities and inpatient rehabilitation facilities.

The strategies in this report could benefit other types of hospitals navigating value-based care.

Some of the challenges reported by safety-net hospitals affect other types of hospitals. Hospitals in rural areas also tend to serve patients who are older and sicker[13] and often have limited community resources to address patient needs.[14] Trauma centers see many fracture patients and lack opportunities to optimize patients with comorbidities before surgery.[15] Across hospital types, screening patients for social needs, and using this information in clinical decision-making and patient-centered care, is common.[16] The strategies and lessons learned in this report could be helpful for all hospitals in transforming their care for patients with complex medical and nonmedical needs and finding success in value-based care models.

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