Maryland CRISP ECIP Case Study

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Introduction – Background and Methods

This case study highlights lessons from Greater Baltimore Medical Center's success in reducing cost and improving quality for joint replacement and fracture patients under Maryland's Episode Care Improvement Program.

ECIP Overview

Maryland's Total Cost of Care (TCOC) Model encourages continued care redesign and creates incentives for health care providers to provide patient-centered care (Centers for Medicare & Medicaid Services, n.d.). The Episode Care Improvement Program (ECIP) is a care redesign track under Maryland's TCOC Model, inspired by the federal Bundled Payments for Care Improvement Advanced (BPCI Advanced) model. It began on January 1, 2019, and is expected to run for 5 years, with application periods each year (CRISP, 2018a). Four primary characteristics define the ECIP (CRISP, 2018b):

1. It has a single, upside-only risk track for the first year. Clinical episodes under this track are triggered by an anchor inpatient stay and consist of a 90-day global period starting the day of discharge from a participating acute care hospital.
2. Twenty-three clinical episode categories are available for hospital selection.
3. It qualifies as an Advanced Alternative Payment Model.
4. Hospital-specific preliminary target prices will be provided to each participant for each clinical episode category in advance of the first reconciliation period of each model year.

Fifteen Maryland hospitals took part in the ECIP in 2019 (29% of Maryland hospitals), with most ECIP episodes in the spine, bone, and joint category (Machta et al., 2021). In 2019, the ECIP reached 3% of Medicare discharges among participating hospitals, indicating a limited reach in the number of participating hospitals, the clinical episode types selected, and the number of discharges covered (Machta et al., 2021). In 2020, the percentage of hospitals increased to 42%, with the addition of nine hospitals from two large health systems (Machta et al., 2021).

GBMC Background

Greater Baltimore Medical Center (GBMC) is a 257-licensed bed facility (acute and subacute care) that handles approximately 23,000 admissions and 52,000 emergency room visits annually. The GBMC surgical centers offer a wide range of surgeries for adults and children, such as joint replacements and orthopedic surgery (GBMC HealthCare, n.d.). At GBMC most physicians are employed and are not independent contractors. GBMC had no experience with episode-based payment models prior to entering the ECIP and is one of the original hospitals participating in the model since 2019. GBMC has achieved notable successes in cost savings in all but one period since implementing ECIP. It is also worth noting that ECIP interventions at GBMC were offered for all patients, regardless of payor.

Description of Interviews

The team conducted three interviews over Zoom in mid-November 2022. Each interview took approximately 1 hour. The ECIP manager/care coordinator, the administrator of the surgery service line, and the clinical lead for the joint and spine program at GBMC were interviewed together. The physician leads for the ECIP joint replacement program and the ECIP hip and low extremity fractures program at GBMC were interviewed separately.

Interview Findings

Lessons Learned

In summary, interviewees identified four key contributors to GBMC's success with the ECIP:

1. **Early and continual collaboration among an interdisciplinary team.** Most highlighted that it often was difficult for one department to implement change. A physician lead stated, "*The number one thing is that true collaboration among an interdisciplinary team that starts long before the patient arrives in the hospital helps drive change.*"
2. **Building and maintaining engagement of key stakeholders.** Building engagement among key stakeholders laid the foundation for this collaborative effort to grow. The ECIP manager/care coordinator stated that the best practice was *"properly conveying the goals of the program to all the key stakeholders so that they had an understanding of what leads to these successes, and potentially future successes, for the clinical episodes that we participate in."*
3. **Leveraging quality metrics for best practices.** Provision of data with stakeholders helped keep providers invested in the ECIP. The ECIP manager/care coordinator indicated, "*They want to know what the numbers are, and how to improve them in terms of the metrics like readmission rates. Utilize metrics for best practices and continue to provide that information to key stakeholders.*"
4. **Having a designated ECIP manager/care coordinator.** Having someone in this position to facilitate collaboration, ensure engagement, present metrics, and manage ECIP details was overwhelmingly named as the reason for GBMC's success.

The successes with GBMC's implementation of the ECIP derived from collaboration, engagement across stakeholders within the hospital and with families/caregivers, and early patient discharge planning. Taken collectively, other hospitals can use these successes and lessons learned to implement the ECIP program.

Initial Implementation Planning

All Maryland hospitals were provided with a baseline analysis workbook containing detailed information on their volume, payments, and preliminary target prices for the modeled clinical episode categories (CRISP, 2018a). The hospital board of directors reviewed the baseline data and decided on the joint replacement episode since the joint center team already had a dedicated pathway that could easily incorporate changes. GBMC held a kickoff meeting with all key stakeholders—care management, performance improvement, surgeons, physical and occupational therapists, orthopedic nurses, translational care, joint and spine directors, and outpatient physical therapy partner called ActiveLife—to educate and provide a space for questions on this change. GBMC implemented an ECIP work group with these key stakeholders to understand the current standardized pathway for joint replacements and find areas that would increase the quality of care while lowering costs. In 2021, GBMC replicated this process for the fracture clinical episode. The main difference was that with the joint replacement episode, GBMC focused on optimizing processes prior to surgery; with the fracture episode, GBMC focused on optimizing the patients' care while at the hospital.

Clinical Care Redesign

Changes to clinical workflows came from the American Geriatrics Society (AGS) CoCare®, an online curriculum GBMC invested in to learn best practices on geriatric care. AGS CoCare outlined the importance of hydrating patients with IV fluids; timeliness in getting an operation; limiting delirium; and getting patients moving. Given that there was an emphasis on getting geriatric patients in and out of surgery as soon as possible, many aspects of clinical care redesign for the episodes revolved around efficiency of workflows through (a) standardization and (b) localization.

Standardization

Both the joint replacement and the hip fracture episode benefited from standardizing workflows for admissions and discharge planning. The joint replacement episode incorporated more preoperative interventions, including a mobility questionnaire and a home assessment with ActiveLife. Another step was shifting the patient discharge workflow to start earlier. The ECIP manager/care coordinator worked in the surgeon's office to arrange aftercare details which included a standardized discharge process with a checklist of written information to be provided to the patient, such as the point of contact for home health providers.

Hip fracture replacements do not have a large preoperative planning window, so changes mainly involved localization and beginning discharge planning based on the patient's functional status at admission. Physicians found they could clear a patient for surgery with a physical exam and lab tests, helping to accelerate the process. Prior to this standardization, care managers could not begin discharge planning until a physical therapist had evaluate the patient, usually on the first day post-operation. With the new workflow, patients were able to get moving faster.

Localization

Interviewees stated that dispersing patients to different inpatient floors for recovery resulted in inefficiencies in care provision. Instead, they implemented localizing patients which involved admitting hip fracture patients to a single service with a single advanced practitioner. One physician lead remarked that this was heavily dependent on co-management from the internal medicine team and that this caused some initial confusion: "*Who is responsible for what? What surgeon is going to be called about the dosage or insulin?*" Having a dedicated advanced clinical practitioner on the inpatient floor to focus on hip fracture patients helped to limit these challenges.

Early Caregiver Engagement in Discharge Planning

The ECIP program manager pointed out that the main problem to address was, "*How to fix unnecessary delays on the hospital side and involving the family*.**"** Involving the patient's family members in patient education early allowed for improved quality of care at home by using a family member or friend as a "*care coach*" to identify patient needs and aid with aftercare. The use of preoperative home assessment and involvement of family included more points of contact for patients to get questions and concerns addressed. This likely fostered patients' self-efficacy during the preadmission-to-discharge process.

"The pre-op home assessment has been truly beneficial. Showing patients how very small changes in their home environment will make it a lot safer for them to go home."
– GBMC Clinical Lead

GBMC scheduled time for families to be present during physical therapy training the day after the patient's surgery. This early involvement was key to their understanding of the patient's care management while at home. The clinical lead for GBMC's ECIP joint and spine program noted that this family education was so significant that nurses and other staff actively avoided any interruptions.

On the matter of discharge planning, one physician lead noted, "*Without preoperative planning, patients and families would more often choose subacute rehabilitation units as the path of least resistance. But for most patients, a discharge to home would lead to better outcomes and better patient satisfaction.*" It was an added benefit that discharges to home also resulted in cost savings.

The ECIP manager/care coordinator guided patients who could not yet return home through a shared decision-making process to know what skilled nursing facilities were available to them based on their insurance. It was important to get patient preferences and begin the discussion early because patients typically have one day to identify a rehabilitation center after being notified of their discharge.

Care Coordination and Care Transitions

GBMC's largest investment in the ECIP was the hiring of an ECIP care coordinator in 2019. The position entailed scheduling pre-operative visits with physical therapy, discharge planning, and managing patients' education through their care. When the hospital decided to take on more episodes of care, they upgraded the ECIP care coordinator role to ECIP manager/care coordinator. The previous ECIP coordinator and the clinical lead for the joint and spine program agreed that the person in the upgraded position should have a social work or care management background to conduct social assessments of patients.

> *"The goal of this program is to streamline care across the care continuum and having a role like the secure coordinator program manager working alongside the group here, as well as the performance team and the clinical directors, really closes that gap for surgeries that are elective in nature." – GBMC ECIP manager/care coordinator*

Each interviewee attributed the program's success to the ECIP manager/care coordinator. This person acted as a point of contact for clinical questions before and after surgery, and her office was integrated into the orthopedics office to facilitate this. She established a discharge track with patients and reassured them when they raised questions or concerns. When interviewed, the ECIP manager/care coordinator commented that she potentially prevented readmissions to the emergency room by addressing the concerns of orthopedic patients during follow-up appointments.

The ECIP manager/care coordinator was directly involved in surgical discussions. This enhanced surgeon engagement because it allowed surgeons to focus on the patient and leave the additional tasks to the ECIP manager. One physician lead remarked, "*They [the surgeons] just had to explain to the patient that it was crucial to their rehab and then the care coordinator would take over the rest of responsibilities.*" The administrator of the surgery service line agreed that having the ECIP manager/care coordinator involved helped with the continuity of discussions with patients which was important during the COVID-19 pandemic when scheduling elective surgeries were challenging.

The ECIP manager/care coordinator position was crucial to care transitions. She compiled a weekly report of all surgical patients, their discussions, patients' anticipated discharge plan, and patient goals. She discussed this report with joint and spine physicians, the inpatient care management team, and the orthopedic service line clinical director. She then shared a summary of this information a week prior to patient admission so that all care team members had timely information about each patient.

Challenges of ECIP

The key challenges with the program stemmed from the adaptations required during initial implementation: encouraging and maintaining engagement with internal staff, data availability, and consistent communication.

Staff Engagement

While GBMC had no difficulty securing financial investments to implement ECIP, one challenge was initial staff buy-in. Implementing the work groups and meetings proved to be vital in showcasing the program's progress and success.

> *"Once people understood the mission and what our plan was, everyone was extremely engaged and happy to help us because they knew it was the right thing to do for the patient. I would say that once we got over that initial hump of 'oh this is something new,' everybody was very open and willing to participate." -GBMC Surgery Service Line Administrator*

Data Availability

The ECIP manager/care coordinator noted the importance of using data, such as patient satisfaction and successful discharges to home, to demonstrate positive outcomes directly to stakeholders to build engagement and buy-in. However, since ECIP is based on 90-day episodes, data lags were inevitable. The ECIP manager/care coordinator stated, "*To engage even the current providers within the workflows or expressing other opportunities to leadership, there were some challenges because everyone wanted more data which unfortunately wasn't always made available in a timely manner*." This impacted GBMC's ability to showcase the ECIP's effectiveness and ability to make changes to further improve their different ECIPs.

After communicating this concern with CRISP, GBMC received additional guidance and was able to anticipate the data to plan more efficiently. GBMC was then able to use their own data system to mimic what ECIP tracks and then reported that information internally. The ECIP manager/care coordinator created an ECIP report to present to the spine committee meeting, the joint committee meeting, and other work groups for specific clinical episodes. Presenting data on patient care improvement helped to further increase buy-in by internal stakeholders.

Consistent Communication

The increased care coordination under the ECIP required a greater volume of communication among care team members. Discussing the details of patient cases via email was not sufficient to communicate ECIP information and ensure that all team members had the same understanding of each

care episode. To address this, the ECIP management team established 30-minute meetings twice a month with the lead surgeons of the ECIP episodes and continued the subgroup meetings with the joint and fracture committees. These meetings were in addition to regular emails and reports.

GBMC was helpful in getting time in the operating room (OR). Orthopedic surgeons are normally the last cases to receive OR time since they are usually nonemergent. This was a potential challenge that GBMC addressed by creating dedicated OR times for orthopedic cases. Depending on the case prioritization of other hospitals, recreating this may not be as easily done.

Successes

Anecdotally, patients from the joint replacement episode reported high satisfaction and positive feedback on preoperative and postoperative planning provided by the ECIP manager/care coordinator. Interviewees also noted that data from 2020 and early 2021 demonstrated patient length of stay for joint replacements decreased and discharges to home increased. The ECIP manager/care coordinator met with patients to complete assessments to inform them of their discharge plans. GBMC then developed a success metric based on the match between discharge plans and patient expectations. The success rate of patient discharges matching the intended outcome was greater than 95%. Unless there were extenuating medical circumstances, patients intending to go home did so.

There were also successes in care team members' engagement with the standardized workflow, specifically in localizing the fracture admissions to the orthopedic service line. Prior to implementation, only 32% of patients were admitted to the orthopedic service line, but recent data show admission of almost 90%. Internally, this represented success in engaging with physicians at GBMC to follow the ECIP workflow. This standardized pathway contributed to decreasing readmission rates data.

Following AGS CoCare best practices also supported GBMC's success, but in less measurable ways. A physician lead noted how these practices helped them to understand the connection between delirium and complications during/after surgery, "*To come in a couple days after surgery and have someone who is in really miserable pain, but they're doing quite well... I think getting them up and moving and getting them through surgery without complications, delirium has a strong impact on that.*"

Physicians knew that they would not benefit financially from participation in the ECIP, but were heavily motivated by the potential improvements in patient care. GBMC experienced some initial challenges in getting physicians to engage, but the successes in patient satisfaction and discharges to home incentivized physicians to continue investing the time to implement the ECIP.

> *"Hip fractures are the ultimate local medical program because all the patients with these hip fractures come from our zip code…. You're really taking care of your neighborhoods, relatives, and neighbors. You want them to have the best care." – GBMC Clinical Lead*

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