1. Please use the space below to provide an executive summary clearly articulating how the hospital will advance the goals of the Hospital Transformation Program (HTP):

- Improve patient outcomes through care redesign and integration of care across settings;
- Improve the patient experience in the delivery system by ensuring appropriate care in appropriate settings;
- Lower Health First Colorado (Colorado’s Medicaid Program) costs through reductions in avoidable hospital utilization and increased effectiveness and efficiency in care delivery;
- Accelerate hospitals’ organizational, operational, and systems readiness for value-based payment; and
- Increase collaboration between hospitals and other providers, particularly Accountable Care Collaborative (ACC) participants, in data sharing and analytics, evidence-based care coordination and care transitions, integrated physical and behavioral care delivery, chronic care management, and community-based population health and disparities reduction efforts.

The executive summary should:

- Succinctly explain the identified goals and objectives of the hospital to be achieved through participation in the HTP; and
- Provide the hospital’s initial thinking regarding how the HTP efforts generally can be sustainable beyond the term of the program.

Response (Please seek to limit the response to 750 words or less)

---

Castle Rock Adventist Hospital, as part of Centura Health, identified three aspirations for our HTP efforts that align with our community needs and feedback: improved patient outcomes, effective transitions of care to community-based services, and addressing behavioral health needs. The intervention and measure selections outlined in this application support our commitment to these goals. We hope to improve patient outcomes by instituting program improvement projects across our connected eco-system that are grounded in robust data and evidence-based practices. Projects will focus on identifying social needs, improving quality outcomes, and collaborating with community partners to ensure timely, appropriate follow-up care and effective transitions of care. Collaboration through data sharing and complementary efforts with community partners will strengthen the network of care available to the shared communities we serve. This interconnectedness and shared goals will allow us to work together to move upstream to increase community access to care and, in turn, provide preventative health care interventions. By moving upstream, we will meet patients where they are at in their healthcare journey and decrease undue burden on the hospital acute care system due to delay in treatment and access to care. Our leading partner in this work will be our RAE for region 3, Colorado Access, a valued community partner providing healthcare resources for our
Medicaid population. The RAE will be vital in addressing our shared patients’ behavioral health needs, one of the highest priority needs identified by our community during the Community and Health Neighborhood Engagement (CHNE) process.

The measure selections will focus on transitions and resources that extend beyond the hospital. The structures that will be implemented will emphasize a connection with community resources in order to promote our mission of health and wholeness.

- How the hospital will advance the goals of the Hospital Transformation Program (HTP).

Castle Rock Adventist Hospital also plans to advance all five of the HTP goals.

1. Castle Rock Adventist Hospital will redesign how we provide transitional care for our shared patients, including a referral process to the RAE. This referral directly to the RAE will allow for greater integration of inpatient and outpatient services and work to improve patient health outcomes, reduce readmissions, and increase access to outpatient specialty care. Some of the new care pathways we plan to implement include complex case rounds, screenings for social needs, collaborative practice guidelines for behavioral health, guidelines for MAT, and screenings for depression and anxiety among pregnant or postpartum women.

2. By implementing improvements in transitions of care, we will also improve the patient experience by ensuring that appropriate care is provided in the proper care setting. Our focus on effective transitions of care to community-based services will create a safety net and encourage patients to follow-up with their next care provider. Examples of next level providers include primary care or outpatient providers, such as medical or behavioral health specialists, who are better equipped than the inpatient hospital setting to care for the patient’s long-term health needs. Our plan to collaborate with the RAE will provide another avenue to ensure patients receive timely follow-up and connect with a provider in their community who takes their insurance.

3. Our focus on improved patient health outcomes through the utilization of robust data to implement evidence-based practices will help to lower Health First Colorado costs. Improved patient outcomes will reduce the need for costly acute care hospital services and evidence-based practices will reduce variation and enhance our efficiency and effectiveness in the care we deliver to our community.

4. We plan to accelerate our readiness for value-based payments by focusing on improved patient outcomes, instituting system-wide dashboards, increasing situational awareness, aligning goals, highlighting process and outcome data, streamlining our performance monitoring and implementing standard work by leveraging our electronic health record, clinical councils and clinical value transformation teams.

5. One of our collaborators within our data sharing, care coordination, and population health improvement interventions will be the RAE. Several of our selected measures require RAE notification. We will investigate how to automate the notification process through our electronic health record, Epic, in a seamless manner so as not to depend on human behavior for a successful outcome. In addition, we also plan to partner with US Acute Care Solutions, our aligned contracted Emergency Department care providers, and Colorado Hospital Association, which both support our ALTO improvement efforts.
• Provide the hospital’s initial thinking regarding how the HTP efforts generally can be sustainable beyond the term of the program.

Castle Rock Adventist’s goal is to sustain our HTP efforts and intervention-specific progress on the HTP measures beyond the five program years. We plan to do so by leveraging existing resources, implementing efficiencies, hardwiring care practices, and finding additional funding opportunities if able. Leveraging incredible and talented people ensures that we are designing successful HTP interventions into our current workflow while assuring the sustainment and program successes are not subject to risk from budgetary changes. We also plan to share the workload of the HTP responsibilities and accountability by partnering with community resources such as our Regional Accountable Entity. Such community partnerships allow for collaborative and seamless care transitions to be provided to our patients in a manner that both meets their health needs and optimizes utilization of the health care system. Lastly, by focusing on preparing for a value-based payment model, we will continue to strive to enhance patient health outcomes including fewer readmissions, shorter lengths of stay, increased notification, decreased mortality, and an overall healthier community. Improved health care outcomes, in turn, will decrease unnecessary utilization of the hospital services and reduce the overall cost of care across the healthcare spectrum.

We plan to sustain our program by garnering ongoing community feedback through attendance at groups such as the Douglas County Health Alliance to assure that we are meeting the needs of the community. The goals and outcomes of the HTP will be monitored and discussed at our facility Quality and Patient Safety Committee and Medical Executive Committee monthly.
2. Please provide the legal name and Medicaid ID for the hospital for which this Hospital Application is being submitted, contact information for the hospital executive, and a primary and secondary point of contact for this application.

   Hospital Name: Castle Rock Adventist Hospital
   Hospital Medicaid ID Number: 675776
   Hospital Address: 2350 Meadows Blvd., Castle Rock, CO 80109
   Hospital Executive Name: Dr. Devin Bateman
   Hospital Executive Title: Chief Medical Officer
   Hospital Executive Address: 2350 Meadows Blvd., Castle Rock, CO 80109
   Hospital Executive Phone Number: 303.269.4016
   Hospital Executive Email Address: DevinBateman@centura.org
   Primary Contact Name: Jane Braaten
   Primary Contact Title: Director of Quality and Patient Safety Officer
   Primary Contact Address: 2350 Meadows Blvd., Castle Rock, CO 80109
   Primary Contact Phone Number: 720.455.2533
   Primary Contact Email Address: JaneBraaten@centura.org
   Secondary Contact Name: Stephanie Brinks
   Secondary Contact Title: Quality Outcomes Program Coordinator
   Secondary Contact Address: 9100 E. Mineral Circle, Centennial, CO 80112
   Secondary Contact Phone Number: 303.673.7210
   Secondary Contact Email Address: StephanieBrinks@centura.org
3. Please use the space below to describe the planned governance structure for the hospital’s HTP engagement and how it will align with the hospital’s overall project management capabilities. The response should address:

- A description of the governance structure that will be put in place to support the hospital’s HTP engagement;
- How the planned structure has been adapted to the needs and unique experiences of the hospital and how it will ensure successful oversight of the hospital’s HTP engagement;
- Specifically, how the structure will ensure management and transparency and engage members of impacted populations and community partners;
- The overall project management structure of the hospital, including how it is organized into operational, clinical, financial, and other functions, and how it will be leveraged to support the hospital’s efforts under the HTP and the governance of those efforts;
- How the hospital’s project management structure is aligned with the hospital leadership structure; and
- The current state of centralized reporting capabilities for the hospital.

Response (Please seek to limit the response to 1,000 words or less)

- **A description of the governance structure that will be put in place to support the hospital’s HTP engagement.**

Centura Health has taken a systematic, comprehensive, and data-driven approach to maintain and improve both quality and our participation as defined by the HTP. Castle Rock Adventist Hospital, a hospital within the Centura Health system, has both a system-wide and hospital-specific governance structure to ensure the continual and redundant oversite to align and support the best possible outcomes for our HTP measure selection, participation, intervention success, and outcome success. As a system, Centura has created a multidisciplinary HTP Steering Committee consisting of enterprise-level representatives from our clinical, mission, financial, community, IT, clinical documentation, strategy, and quality departments.

The HTP Steering Committee’s goal is to identify aligned processes throughout the organization to assure the HTP quality efforts are implemented and maintained at acceptable levels in relation to those chosen standards. HTP oversite is ongoing, both anticipatory and retrospective in its efforts to identify how the system and entities are performing, including who is achieving best practice and whose performance is at risk or has failed to meet standards. The HTP Steering Committee is responsible for providing strategic oversite for the system, removing system barriers and offering direction to the enterprise subcommittee workgroups (see Appendix A for our Centura steering committee charter and Appendix B for our Centura governance structure flowsheet).

There are currently three subcommittee workgroups to support HTP;
• Data/IT subcommittee: which will create all the necessary IT builds, workflows, compliance reports and quality dashboards.

• Community Engagement and Transitions subcommittee: which includes individuals involved in the CHNE process as well as case management and is responsible for ongoing community engagement and assisting with transitions of care from the hospital to community partners.

• Clinical/Quality subcommittee: which includes hospital level quality directors and clinical experts and is responsible for operationalizing new HTP processes.

To support the success of the HTP program, Centura has invested in a dedicated resource to help align program initiatives, workgroups, timeline and support improved outcomes. This new resource works with the HTP steering committee, all HTP workgroups, and coordinates with the RAEs for consistent and aligned communication.

In addition to the system HTP infrastructure, Castle Rock Adventist Hospital, also has our own hospital-specific governance structure to oversee the continuous implementation, compliance, and improvement of HTP processes with the intent to improve our HTP outcomes. The hospital HTP structure oversees our local HTP measures, identifies local barriers to success, identifies areas of opportunity and improved collaboration, and works with hospital teams to fix any underlying obstacles to improvement.

To ensure alignment with the Centura HTP Steering Committee, our Castle Rock Adventist Hospital HTP workgroup consists of the community engagement and transitions subcommittee members from our hospital, the clinical/quality subcommittee members who represent our hospital, additional key leaders, and an executive sponsor (see Appendix C for our hospital’s workgroup charter and Appendix D for our hospital’s governance structure) to efficiently respond to our unique challenges. Other key roles within our hospital HTP team include Case Management, Mission Integration, and Clinical Directors and Managers. This hospital workgroup is guided by the input of our community as relayed to us by the individuals who were involved in the CHNE process and our associates who continue to seek community input. The workgroup used our CHNE process to select the HTP quality measures on which our hospital would like to focus and is responsible for operationalizing any new processes, monitoring progress of implementation, contributing to the progress reports, and addressing sustainability for our defined HTP measures.

• How the planned structure has been adapted to the needs and unique experiences of the hospital and how it will ensure successful oversight of the hospital’s HTP engagement.
The planned HTP governance structure has been adapted to the needs and unique experiences of Castle Rock Adventist Hospital to ensure successful oversight of our HTP engagement and implementation.

- Firstly, Castle Rock Adventist Hospital is represented on the Centura HTP Steering Committee, the community engagement and transitions subcommittee, and the clinical/quality subcommittee through group-level leadership and our own hospital staff participation. At any time, these representatives can bring any concerns/opportunities to HTP subcommittees or Centura leadership to ensure that concerns are addressed.

- Secondly, Castle Rock Adventist Hospital has our own workgroup tasked with responding to the unique needs and experiences identified by our community. Part of our HTP workgroup includes the members who are involved in the CHNE process and who will continue gathering feedback from our community. Community ongoing feedback will continue to direct our work and allow us to revise our plans and processes necessary to respond to our community’s health needs.

Now that we have chosen our measures, our HTP workgroup will also include an executive sponsor. This is a hospital executive with the authority to monitor our progress and lead staff as appropriate to ensure maximum success. The current executive sponsor at Castle Rock Adventist Hospital is the Chief Medical Officer.

- How the structure will ensure management and transparency and engage members of impacted populations and community partners.

Both management and transparency will be ensured through the HTP Steering Committee and our own hospital HTP workgroup. The HTP Steering Committee will set the tone for communications distributed to each hospital in the Centura Health system to clearly define system support, participation, and timeline, and address any questions that individual hospitals might have. Our own hospital workgroup will monitor our hospital’s progress and implementation and monitor teams when strengths and opportunities are identified. Additionally, a SharePoint site was created where all HTP Steering Committee and HTP subcommittee agendas and minutes are shared so that any associate across our connected ecosystem can reference the most up-to-date HTP work that is occurring.

Members of impacted populations and community partners will continue to be engaged via ongoing CHNE work. Our plan for ongoing community engagement includes regular attendance at community forums such as the Douglas County Alliance. This plan is explained in more detail in question 4. Additionally, impacted population will be engaged as target populations for our identified interventions which were chosen in alignment with our CHNE identified needs.

- The overall project management structure of the hospital, including how it is organized into operational, clinical, financial, and other functions, and how it will be leveraged to support the hospital’s efforts under the HTP and the governance of those efforts.

Castle Rock Adventist Hospital addresses performance improvement through our quality department, which is led by a Quality Director and reports to our Chief Medical Officer. Our Quality Director is part of the Clinical/Quality HTP subcommittee workgroup and serves as a leader of our hospital’s HTP workgroup. The Quality Director is responsible for monitoring
quality outcomes and working with the team to make sure that departments are aligned in implementing HTP processes. The Quality department will continue to carry out these duties as it relates to any HTP measures and procedures that are implemented in the hospital. Additionally, the HTP workgroup will report out at our monthly Quality and Patient Safety Committee meetings on progress.

At the enterprise level, Centura utilizes multidisciplinary clinical teams and councils to address system-wide clinical performance improvement projects. These teams or councils already exist. Their clinical work has recently been re-prioritized to address several HTP-related projects. The teams are made up of a multidisciplinary group of experts and include at a minimum physician, nursing, and IT representations. Other disciplines, like case management and financial staff, will participate in workgroups as necessary. They will work alongside our IT Applications Steering Committees (ASCs), which are responsible for approving all major IT and electronic health record workflow requests. The multidisciplinary teams and councils research, implement, and monitor major projects within the Centura system, where the ASCs build, test, and publish recommended changes. The existing HTP-related projects the teams are currently working on will be leveraged to expand their scope of work as necessary to meet HTP standard requirements. This structure will also be utilized when appropriate to address additional HTP projects as milestones are identified either at the system or hospital level.

- How the hospital’s project management structure is aligned with the hospital leadership structure.

Project management is led by the Quality Department. Methodologies used for improving performance include: Lean, Six Sigma, or PDSA depending on the type and scope of the opportunity.

For formal process improvement efforts, Centura Health is committed to the use of systematic methodologies such as Lean concepts including A3. A continuous problem-solving culture is imperative and supported at all levels of the organization.

The type of events (cadence) and the tools utilized are driven by the type of initiative being undertaken (complexity) and the priority level for improvement and/or spread.

All Quality and/or Safety projects are reported at the monthly Quality and Patient Safety Committee which has oversight by the hospital executive team including the CMO and the Board of Directors.

- The current state of centralized reporting capabilities across the hospital system.

The Centura Enterprise Value Analysis Library (EVAL) team is a system supported resource and is responsible for maintaining data governance, validity, and reliability of all the HTP measures. EVAL will align data extracts, building process and outcome dashboards and distribute HTP
compliance reports to the HTP Steering Committee and hospital HTP workgroup to ensure shared oversight, communicate real-time progress, and identify sustained practices. Centura’s data comes from two sources: the electronic health record (Epic) and coded Epic data. EVAL takes both Epic and coded Epic data and organizes it into centralized reports so that every hospital can view their hospital-specific data and know where each metric is performing. By providing a system resource to oversee data governance and report generation, we are ensuring measures are pulled and shared the same way while also freeing up hospital resources to drive improvement work locally. We will explore options for shared dashboards to be located within one dashboard repository warehouse stored within the SharePoint site.

Castle Rock Adventist Hospital utilizes both formal and informal methods for communicating quality information including performance improvement initiatives and emergent patient safety concerns. Communication mechanisms include, but are not limited to:

- Meeting Minutes
- Plans
- Scorecards
- PI team reports
- Medical department reports
- The quality committee regularly scheduled reports
- Committees and departmental staff meetings
- Electronic and physical posting of information
- Newsletters
- Safety huddles, unit huddles, SharePoint sites
- Staff Meetings
- Patient Safety Alerts
4. Please use the space below to describe the hospital’s plan for continuing Community and Health Neighborhood Engagement throughout the hospital’s HTP participation. A detailed plan is not required. Instead, hospitals can outline a high-level approach to CHNE going forward, including, for example, the stakeholders to be engaged and the types and frequency of activities to be used. Hospitals should consult the Continued Community and Health Neighborhood Engagement document, which can be found on the HTP webpage, to ensure their planned activities fulfill program requirements.

Response (Please seek to limit the response to 500 words or less)

As the region’s largest health care network, with one very important mission, the communities we serve, health and wellness guide everything we do. We celebrate the value of each person’s life, whole and healthy, as we seek to combine medical expertise with a compassionate touch to holistically care for a person’s body, mind, and spirit. Centura Health’s 21,000+ mission-centered professionals share our ministry and are guided by our Mission to extend the healing ministry of Christ by caring for those who are ill and by nurturing the health of the people in our communities.

As part of Centura Health, Castle Rock Adventist Hospital highly values the feedback and guidance that our community offers to make sure we are nurturing the health of the people in our community. Moving forward, in alignment with HTP, we plan to intentionally seek stakeholder input on our HTP implementation plans through consultations, community advisory committees, and public engagement. In an effort to be good stewards of our community’s time and resources, we plan to gather information as much as possible from standing community gatherings and meetings where many of these essential stakeholders are already in attendance. Existing structures include our existing Community Health Needs Assessment Advisory Committee, our RAE Program Improvement Advisory Committee (PIAC) and the Douglas County Alliance. In addition, our hospital will also participate in any annual HTP learning symposia hosted by HCPF as an opportunity to share lessons learned and successes of the HTP program.

Castle Rock Adventist Hospital will host community meetings to report on the Hospital Transformation Program and our Community Health Implementation Plan annually to our Community Health Needs Assessment Steering Committee and stakeholders as required through HB 19-1320. Castle Rock Adventist Hospital plans to include the following stakeholders in our plan for ongoing community engagement and feedback:


2. Metro Denver Partnership for Health Steering Committee, Behavioral Health Committee and Social Health Information Exchange Committee made up of all public health departments in Metro Denver, representation from Human Services Directors of Metro Denver, local hospitals and Regional Accountable Entities.
3. Community Health Implementation Plan Community Input Meeting will include TriCounty Public Health, Home Care Assistance, American Heart Association, Colorado Access, Douglas County Public Schools, Seventh Day Adventist Church, South Metro Fire, Mile High Ministries, Colorado Wellness, Douglas County Sheriff, All Health, Stride Community Health Center, NAMI Colorado, Mile High Health Alliance, South Metro Chamber of Commerce, Town of Castle Rock, Doctors Care, Douglas County Human Services, Denver Regional Council of Governments, Colorado Commission on Higher Education, Office of Saving People Money on Healthcare, and Denver Regional Council on Governments. Additionally, all stakeholders included in the CHNE process across Metro Denver will be informed of these annual meetings, based upon those serving the Castle Rock Adventist Hospital Service Area. (see Appendix F)

Additional stakeholders will be engaged as they are identified.

We plan to engage stakeholders by various means throughout HTP. We are committed to promoting our meetings through various means and via any mechanisms offered through Health Care Policy and Finance Hospital Transformation Program. All meetings will be accessible through a variety of methods such as in person, via telephone, and via web teleconferencing. Castle Rock Adventist Hospital will offer accommodations for disabilities of which we are notified in advance. All Castle Rock Adventist Hospital facilities meet ADA requirements.

Castle Rock Adventist Hospital has been regularly attending Douglas County Health Alliance meetings and the Metro Denver Partnership for Health Steering Committee, Behavioral Health and Social Health Information Exchange Committee meetings.
5. As part of continuing Community Health Neighborhood Engagement (CHNE), hospitals must share a draft of their application with stakeholders before submitting it to allow stakeholders the opportunity to provide feedback for hospitals’ consideration. The Department of Health Care Policy & Financing will also make submitted applications public once applications are complete and approved by the review board. Please refer to the Ongoing CHNE Requirements document on the Hospital Transformation Program website for a list of key stakeholder categories. At a minimum, the stakeholders should include those who engaged in or were invited to engage in the CHNE process.

Please use the spaces below to provide information about the hospital’s process for gathering and considering feedback on the hospital’s application.

Please list which stakeholders received a draft of your application and indicate which submitted feedback.

Response (Please seek to limit the response to 250 words or less)

Please explain how the draft application was shared and how feedback was solicited.

Response (Please seek to limit the response to 250 words or less)

With a bulleted list, please list the shared stakeholder feedback and explain if any changes were made to the application based on the feedback. If no changes were made, please explain why. If the same or similar feedback was shared by more than one stakeholder, please list it only once.

Response (Please seek to limit the response to 500 words or less)

•
6. Please use the space below to identify which statewide and local quality measure(s) from the [HTP Measure List on the Colorado Hospital Transformation Program website](http://www.colorado.gov/hcpf) the hospital will address for each Focus Area.

Hospitals have the option to replace a local measure with a statewide priority. Each statewide priority will be worth 20 points and, if selected, the points for each remaining local measure will be equal to the remaining total required local measure points divided by the number of local measures, greatly reducing the risk associated with those measures.

As applicable, please identify the Statewide Priority your hospital is pursuing as a part of the HTP Hospital Application:

- [ ] SP-PH1 - Conversion of Freestanding EDs
- [ ] SO-PH2 - Creation of Dual Track ED

Please note that hospitals are required to complete the accompanying Intervention Proposal for the statewide priorities identified above.

The selections should align with the hospital’s improvement priorities and community needs. As a reminder, hospitals must adhere to the following requirements when selecting quality measures:

- **Large hospitals** (91+ beds) will be accountable for six statewide measures, totaling 60 points and a minimum of four local measures, which will account for 40 points. Points per local measure will equal 40 divided by the number of local measures selected.
- **Medium hospitals** (26-90 beds) will be accountable for six statewide measures and a minimum of two local measures. If two local measures are selected, statewide measures will total 75 points, and local measures will account for 25 points. Points per local measure will equal 25 divided by the number of local measures selected. If three local measures are selected, then statewide measures will total 67 points and local measures will account for 33 points. Points per local measure will equal 33 divided by the number of local measures selected. If four or more local measures are selected, then statewide measures will then total 60 points and local measures will account for 40 points. Points per local measure will equal 40 divided by the number of local measures selected for four or more local measures.
- **Small hospitals** (<26 beds) excluding critical access hospitals will be accountable for six measures (statewide or local) to account for 100 points. Points per each measure will equal 100 divided by the number of measures selected.
- **Critical access hospitals** will be accountable for six measures (statewide or local) and will have their risk for measures reduced by 40%.
- **Pediatric hospitals** will be accountable for five statewide measures, totaling 50 points and a minimum of five local measures, which will account for 50 points. Points per local measure will equal 50 divided by the number of local measures selected.
- **Respiratory specialty hospital(s)** will be accountable for four statewide measures and a minimum of four local measures. If four measures are selected then statewide measures will total 56 points and local measures will account for 44 points. Points per local measure will equal 44 divided by the number of local measures selected. If five or more measures are
selected, then statewide measures will total 50 points and local measures will total 50 points. Points per local measure will equal 50 divided by the number of local measures selected.

Please use the unique identification code from the Performance Measures List (which is available on the HTP website) to identify your selected measures. For example, the measure “30 Day All Cause Risk Adjusted Hospital Readmission” should be listed as SW-RAH1.

Response (Please format the response as a numbered list)

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SW-RAH1: 30-day All-Cause Risk Adjusted Hospital Readmission (10 points)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SW-CP1: Social Needs Screening and Notification (10 points)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>SW-BH1: Collaboratively develop and implement a mutually agreed upon discharge planning and notification process with the appropriate RAE’s for eligible patients with a diagnosis of mental illness or substance use disorder (SUD) discharged from the hospital or emergency department (10 points)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>SW-BH3: Using Alternatives to Opioids (ALTO’s) in Hospital Emergency Departments: 1) Decrease Use of Opioids 2) Increase Use of ALTO’s. (10 points)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>SW-COE1: Hospital Index (10 points)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>SW-PH1: Severity Adjusted Length of Stay (LOS) (10 points)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>RAH4: Percentage of Patients with Ischemic Stroke who are Discharged on Statin Medication (eCQM) (10 points)</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>CP1: Readmission Rate for a High Frequency Chronic Condition - 30 day adult/30 day pediatric (10 points)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>CP6: Screening and Referral for Perinatal and Post-Partum Depression and Anxiety and Notification of Positive Screens to the RAE (10 points)</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>BH2: Initiation of Medication Assisted Treatment (MAT) in Emergency Department or Hospital Owned Certified Provider Based Rural Health Center (10 points)</td>
<td></td>
</tr>
</tbody>
</table>
7. Please use the space below to identify all of the hospital’s proposed interventions. Following each listed proposed intervention, please identify which of the measures from the response to Question 6 will be addressed by that intervention. Please list the unique identification code listed in response to Question 6 to identify the applicable measures and please format your response in accordance with the following example:

<table>
<thead>
<tr>
<th>Intervention Name</th>
<th>Measures: SW-RAH1, RAH2</th>
</tr>
</thead>
</table>
| Complex case rounds | a. Primary Measure(s) Affected: SW-RAH1, CP1  
                        b. Potentially Affected Measure(s): SW-BH1, SW-CP1 |
| Implement standardized assessment and referral for social needs | a. Primary Measure(s) Affected: SW-CP1  
                                                                 b. Potentially Affected Measure(s): SW-RAH1, CP1 |
| Implement standardized collaborative care process for behavioral health | a. Primary Measure(s) Affected: SW-BH1  
                                                                            b. Potentially Affected Measure(s): SW-RAH1, SW-CP1, BH2, CP6 |
| Colorado Hospital Association ALTO model | a. Primary Measure(s) Affected: SW-BH3  
                                                  b. Potentially Affected Measure(s): SW-BH1 |
| Create a standard approach leveraging cost quality data (Crimson) for clinical teams and continuous improvement | a. Primary Measure(s) Affected: SW-COE1  
                                                                 b. Potentially Affected Measure(s): SW-RAH1, SW-PH1, CP1 |
| Length of stay and readmission committee | a. Primary Measure(s) Affected: SW-PH1  
                                                   b. Potentially Affected Measure(s): SW-RAH1, CP1 |
| Stroke education and enhanced quality monitoring | a. Primary Measure(s) Affected: RAH4  
                                                                       b. Potentially Affected Measure(s): SW-RAH1, SW-COE1 |
| Edinburgh Depression Scale screening | a. Primary Measure(s) Affected: CP6  
                                                          b. Potentially Affected Measure(s): SW-BH1 |
| Implement standardized MAT program in the ED | a. Primary Measure(s) Affected: BH2  
                                                        b. Potentially Affected Measure(s): SW-BH1, SW-BH3 |
Hospital Transformation Program

Intervention Proposal

I. Background Information

This Intervention Proposal is designed to clearly articulate the scope and goals of proposed transformation interventions aimed at impacting the hospital’s selected local quality measures under the HTP. The following questions are meant to assist the state in identifying: the evidence base for each intervention; the need within targeted communities for the implementation of the interventions; and how the interventions will advance the goals of the HTP.

Hospitals will not be required to implement a specified number of interventions. Instead, participation requirements are based on the selection of local quality measures to impact within the five HTP Focus Areas:

- Reducing Avoidable Hospital Utilization
- Core Populations
- Behavioral Health and Substance Use Disorders
- Clinical and Operational Efficiencies
- Community Development Efforts to Address Population Health and Total Cost of Care

Hospitals will be required to address statewide measures for each Focus Area. Hospitals will also be required to select from the HTP list of local measures across the five Focus Areas based on community needs and the goals of the HTP. Each hospital will be required to work on a set of measures equal to 100 points. The number, mix and points per measure will vary according to hospital size, defined by bed count or specialty type:

- Large hospitals (91+ beds) will be accountable for six statewide measures, totaling 60 points and a minimum of four local measures, which will account for 40 points. Points per local measure will equal 40 divided by the number of local measures selected.
- Medium hospitals (26-90 beds) will be accountable for six statewide measures and a minimum of two local measures. If two local measures are selected, statewide measures will total 75 points, and local measures will account for 25 points. Points per local measure will equal 25 divided by the number of local measures selected. If three local measures are selected, then statewide measures will total 67 points and local measures will account for 33 points. Points per local measure will equal 33 divided by the number of local measures selected. If four or more local measures are selected, then statewide measures will then total 60 points and local measures will account for 40 points. Points per local measure will equal 40 divided by the number of local measures selected for four or more local measures.
- Small hospitals (<26 beds) excluding critical access hospitals will be accountable for six measures (statewide or local) to account for 100 points. Points per each measure will equal 100 divided by the number of measures selected.
- Critical access hospitals will be accountable for six measures (statewide or local) and will have their risk for measures reduced by 40%.
• Pediatric hospitals will be accountable for five statewide measures, totaling 50 points and a minimum of five local measures, which will account for 50 points. Points per local measure will equal 50 divided by the number of local measures selected.
• Respiratory specialty hospital(s) will be accountable for four statewide measures and a minimum of four local measures. If four measures are selected then statewide measures will total 56 points and local measures will account for 44 points. Points per local measure will equal 44 divided by the number of local measures selected. If five or more measures are selected, then statewide measures will total 50 points and local measures will total 50 points. Points per local measure will equal 50 divided by the number of local measures selected.

Hospitals have the option to work on local measures beyond the required minimum. This would spread the local measure risk by reducing the points per local measure.

In addition, hospitals have the option to replace a local measure with a statewide priority. Each statewide priority will be worth 20 points and if selected the points for each remaining local measure will be equal to the remaining total required local measure points divided by the number of local measures, greatly reducing the risk associated with those measures.

Hospitals should consult the Measure Scoring Summary, which can be found on the HTP webpage, for more information about measure selection, requirements and scoring.

Hospitals must then design five-year interventions that will impact their selected quality measures.

Hospitals must demonstrate that their proposed interventions will fulfill the goals of the HTP and are evidence-based. They must also justify the selection of each intervention based on the findings of the Community and Health Neighborhood Engagement process, including the environmental scan and feedback.

Each hospital will need to report its own data and submit its own application, but partnerships between hospitals may occur in some instances.

Hospitals may leverage existing resources for interventions, and existing interventions may be considered insofar as they expand or enhance the Department’s noted goals and meet the following criteria:
• The hospital must demonstrate that the existing intervention is being selected because it is the best approach for meeting the needs of the community identified during the Community and Health Neighborhood Engagement process.
• The hospital must demonstrate that the intervention can and will be enhanced to meet HTP goals.

In addition to meeting the above criteria, any hospital proposing existing interventions for participation in the HTP will be expected to propose and implement accelerated milestones in the Implementation Plan for such interventions.

This Intervention Proposal must be completed separately for each of the interventions being proposed for inclusion in the HTP. Hospitals must submit interventions that, together, address all of the statewide quality measures and the local quality measures listed in the hospital’s response to Question 6 in the Hospital Application.
II. Overview of Intervention

1. Name of Intervention: Complex case rounds

2. Please use the table below to identify which statewide and selected local quality measures (from the hospital’s response to Question 6 in the Hospital Application) the hospital will address through this intervention. As a reminder, each of the statewide and selected local quality measures must be identified for at least one intervention. As such, if this is the only intervention addressing a given Focus Area, all statewide quality measures and all selected local quality measures for that Focus Area must be included in this response. This response should align with the intervention-specific list included in the response to Question 7 in the Hospital Application.

Please note, hospitals are also required to complete the Intervention Proposal below for statewide priorities identified in Question 6 of the HTP Hospital Application.

Please use the unique identification code from the Performance Measures List (which is available on the HTP website) to identify your selected measures. For example, the measure “30 Day All Cause Risk Adjusted Hospital Readmission” should be listed as SW-RAH1.

Response (Please format the response as a numbered list)

1. SW-RAH1
2. CP1
3. SW-BH1
4. SW-CP1

3. Please use the space below to describe the intervention and the rationale for its selection. Responses should include:
   - A description of the intervention; and
   - How the intervention advances the goals of the HTP.

Response (Please seek to limit the response to 1,000 words or less)
   
   Castle Rock Adventist Hospital plans to create and implement standardized, complex case rounds with our RAE partner to improve the care of the vulnerable populations we serve within our community. Through this HTP intervention, we will decrease our patients’ risk for readmission while shortening the length of stay by understanding any social needs and/or transitions of care needs that exist during the inpatient admission.

Complex case rounding will occur at least weekly or at an interval specified by the hospital case management department, determined by the complex cases in the hospital at the time. The meeting may include, as appropriate to the patient’s situation, the hospital’s case management team, a hospitalist physician, a patient representative, and a quality team member. Other hospital staff, such as ED physicians or nursing staff, will be invited as specific complex cases are identified needing their expertise. These complex case rounds will take place in partnership with the local Regional Accountability Entity (RAE) representative. They may also include other community representatives like primary care physicians or local federally qualified health center (FQHC) representatives. All
participating external partners will sign the appropriate confidentiality forms or have a standing Business Associate Agreement on file with the hospital.

Complex patients will be chosen for case review during complex case rounds based on several factors, such as

- The highest risk for readmission, taking into consideration the patient’s LACE+ score. The LACE+ score is a single score of a patient’s risk for readmission that is automatically calculated through documentation within our electronic health record. LACE is an acronym that stands for Length of stay, Acuity of admission, Comorbidities, and Emergency department visits. A patient at greater risk for readmission will have a higher LACE+ score; patients are grouped into low, moderate, and high-risk categories and the score will appear within the EHR as green, yellow, or red based on their LACE+ risk level.
- A chronic history of frequent ED visits.
- Multiple chronic disease conditions.
- Multiple social needs.
- Chronic history of longer than expected lengths of stay.
- History of increased demand of hospital resources (usually inpatients but can be ED patients if the team identifies an opportunity).

The process for prioritization in which patients require a complex case review will be based on an evidence-based approach. Through the milestone phase, Centura will research and finalize

- Whether to choose a validated tool for selecting complex patients for review or;
- Create a standardized internal algorithm based on analysis of the literature to guide the creation of our own algorithm.

Whichever solution, the final method will then be distributed, and education provided across our connected ecosystem to the hospital and RAEs to prioritize complex patients for case reviews.

During the complex case rounds meeting, the team will create in conjunction with the RAE and other participating community resources;

- A collaborative plan for inpatient discharge, transitions of care, and readmission avoidance.
- Case Management will finalize the discharge plan within the electronic medical record and address all interventions identified in the collaborative plan to support the successful discharge of the patient.
- The RAE or their designee will be responsible for follow-up contact with the patient after discharge, as agreed upon during the review. The RAE or their designee will ensure that the patient is following their collaborative plan and receiving required outpatient follow-up care which could include long-term acute care, skilled nursing facilities, appointments with specialists and primary care, home health care, behavioral health services, and social needs.
In order to implement the complex case intervention, several opportunities have been identified.

- First, a standardize prioritization algorithm will need to be chosen or created to identify and risk-stratify complex patients for review.

- Second, appropriate HIPPA and 42 CFR Part 2 documents will need to be signed by each external community partner who wishes to participate within in the complex case reviews to ensure confidentiality.

- Third, a standardized template will need to be created and implemented to outline the process and collaborative planning discussion during the complex case rounds.

- Finally, workflows within in the electronic health record for documenting the collaborative plans will need to be created, tested, and published.

The above opportunities will be finalized and addressed in the implementation plan and a timeline for achieving each milestone will be determined.

- How the intervention advances the goals of the HTP.

Implementation of complex case rounds advances all five of the HTP goals;

1. First, we plan to improve patient outcomes through care redesign by implementing a new process of complex case rounds for Medicaid patients in collaboration, at a minimum, with the local RAE. This intervention will allow the hospital to focus resources on our most vulnerable patients and partner with the RAE for the successful transition of care. We hope to improve patient outcomes by identifying outpatient and preventive care resources to address clinical and social needs.

2. Next, the intervention will improve the patient experience in our healthcare delivery system by ensuring appropriate care is delivered within the appropriate care settings. Using this intervention, the hospital will be able to identify opportunities for outpatient care that would be appropriate for the patient’s unique needs and help the patient avoid the use of more acute care settings when unnecessary. The intervention will also increase the likelihood of a positive patient experience through collaboration across disciplines, ensuring that we are not repeating efforts and inundating the patient with questions that others have already asked.

3. Third, we will lower Health First Colorado costs through reductions in avoidable hospital utilization, readmissions, and increased effectiveness and efficiency in care delivery. This collaborative community approach to complex patients will help us identify opportunities where outpatient and preventive care is a solution rather than acute hospitalization. Connecting the patient to such care will help prevent readmissions and high-cost resources.

4. Furthermore, this intervention will accelerate Castle Rock Adventist Hospital’s readiness for value-based payments by focusing on improved patient outcomes. This new intervention will help us focus on the long-term transition of care planning, including follow-up outpatient care after hospitalization that will benefit the patient’s overall health outcomes.

5. Lastly, we will increase collaboration between our hospital and other providers within the community. The RAE will be a required participant in our complex case review process, increasing
collaboration between the hospital and Medicaid. The RAE covers both physical and behavioral health care, including chronic care management, opening a wide array of services to the patient that would have otherwise been more difficult to access solely by our hospital case management team. Within the complex case reviews, we will be discussing the patient’s social needs to reduce disparities in health care access and health outcomes. This intervention will facilitate greater sharing of patient data with the RAE so they can be aware of who is in our hospital and who needs to be reviewed.

4. Please use the space below to describe how the intervention and any selected local quality measures to be addressed by the intervention align with community needs identified throughout the Community and Health Neighborhood Engagement process (including data identified in the hospital’s CHNE midpoint and final reports), including but not limited to:

- How the intervention and any selected local quality measures to be addressed by the intervention were selected based on identified community needs, including how they align with identified significant behavioral and physical health needs and/or service capacity resources and gaps, including related to care transitions and social determinants of health;
- How the population of focus aligns with identified community needs; and
- How the proposed intervention will leverage available medical and/or social resources and partners.

Response (Please seek to limit the response to 1,500 words or less)

- How the intervention and any selected local quality measures to be addressed by the intervention were selected based on identified community needs, including how they align with identified significant behavioral and physical health needs and/or service capacity resources and gaps, including related to care transitions and social determinants of health.

This intervention and the quality measures addressed by it, align with the community needs that were identified during our Community and Health Neighborhood Engagement (CHNE) process. Chronic conditions such as those that will specifically be addressed in this intervention and that were recurrently brought up during our community discussions include obesity/overweight, asthma, hypertension, high cholesterol, COPD, congestive heart failure, and cancer. Behavioral health was also prioritized as a community concern in the neighborhoods served by Castle Rock Adventist Hospital. Those living and working in our area are concerned about the high rates of suicide and hospitalizations for suicide, substance use disorders, and prenatal and postpartum depression. Furthermore, some expressed concern about the high utilization of acute health care services and inappropriate utilization of the ED when outpatient clinics could address a patient’s healthcare concerns. Our complex case intervention will make sure to consider all these concerns expressed by our community.

Social needs will also be discussed during complex case rounds and are one of the top priorities identified in our CHNE. Social needs, such as access to healthy foods or transportation to medical appointments, directly impact our communities’ health outcomes, especially patients living with chronic conditions. Housing was specifically cited as a significant concern. Housing directly affects the length of stay, cost of care, and the discharge planning process. For example, patients who are homeless and require oxygen, feeding tubes, or other outpatient care interventions cannot be discharged safely to the streets.

Another issue brought up in our CHNE was the perception that there are many “care coordinators” but not much coordination. The gap was that the hospital often provides a list of resources but there
The Colorado Healthcare Affordability and Sustainability Enterprise (CHASE) is a government-owned business within the Department of Health Care Policy and Financing.

www.colorado.gov/hcpf

is no face to face connection with the resources or help with contacting and actually coordinating the care. Our complex case rounds will assure that the resources and the patients who need them are coordinated effectively.

- How the population of focus aligns with identified community needs.

Our target population for this intervention will be Medicaid patients with complex case needs. These patients include those with multiple chronic conditions, higher risk for readmission (LACE + score), a history of frequent ED visits, behavioral health concerns, and identified social needs. These focus areas align with what our community specified they would like us to prioritize, namely social needs, chronic conditions, behavioral health, and high utilization and/or inappropriate use of healthcare services. Working together with the local RAE will allow us to create a comprehensive discharge plan ensuring that the individual patient’s needs are met after their hospital discharge including adequate follow-up care in the community. The RAE will have expert knowledge of physical, behavioral and social support resources that will best meet each individual patient’s transition of care needs. During complex case rounds, the RAE will be available to understand the complex needs of the patient, offer expertise on community resources available, and support the patient’s needs after they have been safely discharged.

- How the proposed intervention will leverage available medical and / or social resources and partners.

Our proposed complex case rounds intervention will leverage and increase collaboration with our essential community healthcare partner: our local RAE. The RAE is the expert on local Medicaid healthcare resources and connects patients to outpatient support that will aid in their overall improved healthcare outcomes. The RAE knows of and has more access to local community resources than our hospital-based case management team. Pairing the RAE’s expertise with our case management team’s comprehensive discharge planning approach will lead to an all-inclusive post-acute care plan that addresses multiple facets of patient needs to ultimately lower length of stay, prevent readmissions, and decrease unnecessary utilization of hospital and ED services.

The resources provided to patients that are available in our community which the Case Management will be referring to more frequently for Mental Health include: All Health, Heart Center counseling and Clarity - all accept Medicaid. Resources for patients that struggle with substance abuse are encouraged to attend AA meetings for ETOH, Behavioral Health Group - provides assistance with Opiate abuse. At times we refer patients to Denver since there are more available resources such as Addiction Research Treatment Services. When a patient is deemed disabled, the Case Management team will initiate the process of completing the ULTC 100.2 to assist in Long Term Placement at Skilled Nursing Facilities or Assisted Living Facility, such as Silver Heights, Brookside Nursing Home, Orchard Park Nursing Home, Sweets at Parker. Case Management assures patients are aware of the transportation service offered by Medicaid to assist for transport to their follow up medical and mental health appointments. The transportation service is IntelliRide.

5. Please identify the evidence base (academic, professional or otherwise) related to this intervention’s use among the target population by selecting one of the following options:

   (1) Randomized Control Trial (RCT) level evidence
   (2) Best practice supported by less than RCT evidence
   (3) Emerging practice
(4) No evidence

If you selected option 1, 2 or 3 above, please use the space below to summarize the evidence base (academic, professional or otherwise) related to this intervention’s use among the target population. The response should address the intervention’s ability to impact the selected local and statewide quality measures identified in Question 6 in the Hospital Application. Please submit the response in narrative form and provide links to any reference documentation (data, citations, etc.).

If you selected option 4 indicating that there is no known evidence base, please explain why this intervention is being proposed regardless.

Response (Please seek to limit the response to 1,500 words or less)

(3) Emerging practice

According to Advisory Board International, improvement of population health care must “encourage stakeholders to work together in a person-cent[ered] approach to effectively manage a population in the lowest-cost appropriate setting and to reduce inappropriate demand for treatment” (p. 4, 2018). They outline several critical factors for improvement of population health, which we plan to utilize in our approach, including engaging stakeholders, working together, a person-centered approach, and stratifying the population into tiered risk-levels.

When it comes to engaging stakeholders and working together, the literature offers many suggestions for success in healthcare. In their review of the literature, Morley and Cashell (2017) find evidence that such collaboration leads to improved outcomes, quality indicators, patient safety, and higher staff engagement. In another study of case management collaboration on patient discharge planning with home care liaisons, Kelly and Penney (2011) created a set of guidelines they believe help improve collaboration. These guidelines include familiarizing one another with each person’s practices and experience, clear delineation of roles and responsibilities, making time for ongoing discussions and follow-up opportunities, and recognizing that the ultimate responsibility for discharge planning lies with case management.

Taking these guidelines, a hospital can put together a collaborative care coordination team that can be quite successful in improving readmission rates and cutting costs. A case study supported by the Robert Wood Johnson Foundation looked at the Eastern Virginia Care Transitions Partnership (EVCTP) (Kozick, 2017). This program was designed to reduce hospital and nursing home readmissions among older adults with complex care needs utilizing a care transition model that was evidence-based and used in-home assessments. By partnering with various community-based organizations, the program reduced 30-day readmission rates from 18.2% to 8.9% over two years and saved more than $17 million. Among other interventions, the program addressed the social determinants of health among Medicare and dual-eligible patients with chronic conditions. In a group of Medicaid patients, the program was able to drop readmissions from 25% to 6%, with an estimated savings of $1.5 million.

Our complex case rounds intervention will focus on Medicaid patients with complex care needs. We plan to collaborate with the RAE and other community partners who are interested in addressing transitions of care and understanding social needs, such as the above cited literature references, to be successful in reducing costs and readmissions. The regularity of this intervention will allow for those elements that Kelly and Penney (2011) found to be components of successful collaboration, specifically, familiarizing each other with our practices and experiences, and making time for discussion and follow-up.
A multi-pronged approach to collaboration and addressing contributors to readmission, such as the one we are proposing, has been found in the literature to reduce the likelihood of readmissions. For example, North Carolina initiated a statewide transitions of care program targeting readmissions among high-risk Medicaid patients (Jackson et al., 2013). They utilized a multicomponent approach and found the patients who participated in the intervention were 20% less likely to be readmitted in the year following their discharge. The effects were most significant among those at the highest risk for readmission. Indeed, one literature review found that single issue readmission programs were not likely to reduce readmission rates while multicomponent programs were (Kripalani et al., 2014). Specifically, those that were most effective in randomized control trial studies all transitioned the patient during discharge with a dedicated transition of care staff member, patient-centered discharge instructions, and telephone follow-up care while other effective programs targeted the highest risk patients. Our approach will not include those specific components. Still, it will target those who are at the highest risk for readmission and will address multiple contributing factors such as chronic conditions, access to primary and specialty care, and social needs.

One important contributing factor that will be included in complex case rounds will be a patient connection to a primary care provider. Wiest et al. (2019) conducted a retrospective study of patients discharged from inpatient stays in Camden, NJ. They found that patients who were seen by a PCP within seven days of their discharge were less likely to have 30- and 90-day readmissions than those who were not seen by their PCP in that time-frame. The 30-day readmission rate for those who were seen was 12.7% and for those who did not have an appointment was 17.5%. Complex case rounds will be an opportunity for both the hospital and RAE to identify patients who need follow-up PCP care or who do not already have a PCP.

In its Hospital Guide to Reducing Medicaid Readmissions, the Agency for Healthcare Research and Quality (AHRQ) (2014) offers many suggestions for improving a hospital’s transition of care process. AHRQ recommends utilization of the Readmission Risks Tool, inquiring about the social determinants of health, listening to the patient’s own reasons for returning to the hospital, connecting patients to primary care and other services, and sending real-time information to outpatient care providers and health plans. AHRQ also recommends collaborating with partners in the community, specifically Medicaid, and identifying those appropriate resources in the community for Medicaid patients. Finally, they state that it’s best to elevate the standard of care for all patients but recommends providing further enhanced services for those patients who are high-risk. Castle Rock Adventist Hospital is already utilizing the LACE+ to determine readmission risk. A patient’s social needs will be reviewed on inpatient admission and connecting the patient to a PCP and other services will be discussed during complex case rounds.

An important factor in creating successful readmission reduction programs is accurately identifying patients who would benefit from the intervention. The California Quality Collaborative and the California HealthCare Foundation developed a complex care management toolkit based on input from experts, evidence-based literature reviews, and engagement of health organizations working on redesigning complex care (2012). In this toolkit, they outline several steps for developing a complex care program, including identifying the correct patients by utilizing an algorithm or a predictive risk tool and stratifying the patients into different risk levels. Several tools are listed as options for identifying and stratifying patients for such a program. Similarly, the Medicaid Innovation Accelerator Program (IAP) recognizes risk stratification as an important part of identifying and managing what they term Medicaid Beneficiaries with Complex Care Needs and High Costs (BCNs) (Medicaid Innovation Accelerator Program, 2018). Although states often rely on claims data for their stratification models, IAP opines that useful information can also be gleaned from other data.
sources, such as other state agencies, ADT feeds, and self-reported screening questionnaires. They also list as examples several tools that could be used, such as the Chronic Illness Disability Payment System (CDPS), CRG Classification System, Impact Pro and ERG, Adjusted Clinical Groups (ACG ®), and DxCG. According to Kripalani et. al (2014), several tools are available for predicting risk levels among patients. Still, only a few have a C-statistic of 0.8 or greater, which is considered excellent in terms of discriminative capability. One useful tool recommended is Project BOOST (Better Outcomes for Older adults through Safe Transitions), from the Society of Hospital Medicine, which assesses risk factors and offers suggested interventions for each factor (2014). Such literature will be consulted when Centura considers tools and algorithms to identify patients for our complex case rounds.

SOURCES:


6. a. Does the focus of the proposed intervention intersect with ongoing initiatives statewide (including, but not limited to those included in the ACC, State Innovation Model and Comprehensive Primary Care Plus)?
   - Yes
   - No

b. If yes, please identify the applicable statewide initiative(s): (you may select more than one response from the list below)
   - Behavioral Health Task Force
   - Affordability Road Map
   - IT Road Map
   - HQIP
   - ACC
   - SIM Continuation
   - Rx Tool
   - Rural Support Fund
   - SUD Waiver
   - Health Care Workforce
   - Jail Diversion
   - Crisis Intervention
   - Primary Care Payment Reform
   - Other: ___ (please identify)

Please also use the space below to briefly explain how the hospital will ensure the intervention aligns with the applicable ongoing initiative(s).

Response (Please seek to limit the response to 750 words or less)

ACC

This complex care rounds intervention intersects with the Accountable Care Collaborative model. We will be working closely with the RAE for our region to coordinate care for patients with complex...
health needs. The RAE will be invited on a regular basis to review currently admitted patients and help establish a discharge plan that meets the patient’s complex needs with the intent of reducing the risk of readmissions. Such collaboration with the RAE will allow for high-performing, cost-effective solutions to complex, high needs situations while also serving to improve both member and provider experience.

7. Please use the space below to explain any experience the hospital or any affiliated community partners have had with this type of intervention or target population and how that experience will support the success of the intervention.

Response (Please seek to limit the response to 500 words or less)

Castle Rock Adventist Hospital has moderate experience with complex case rounds. Firstly, patients are locally assessed in the ED when it appears that the case is socially complex. A multidisciplinary (Case Manager, Manager of Case Management, ED RN, lead RN and ED MD) meeting occurs initially in the ED to determine if a patient needs to be admitted due to placement without having a medical need. A checklist is used to determine all resources have been exhausted prior to admitting the patient. A consult is placed (this may be an informal phone call at first) for the Behavioral Health Business Team to discuss the options for a safe discharge disposition.

Once a patient is admitted and the LOS is over 7 days (due to medical complexity or difficult placement), a team consisting of Case Manager, Manager of Case Management, MD and RN meet on a weekly basis to review current status of the hospitalization and assure plan for discharge remains in place. The information is tracked by the Case Management manager in a complex case binder.

Case Management communicates once to twice a week with the RAE on complex cases. Several community resources are available to us, including the community transition program sponsored by Medicaid to assist patients residing in a nursing home return back into the community. Patients are assessed for the safest discharge plan. When deemed necessary, the Case Management team coordinates the discharge to Medicaid accepting facilities based on physical therapy recommendations. As previously mentioned, if the placement is due to long term disability, the Case Management team will initiate and guide the process of submitting the UTLC 100.2 for transitioning into a skilled nursing facility for long term care. The patients’ support systems are included during the plan of care.

The Case Management team provides a list of all Medicaid patients to the RAE on a weekly basis. The RAE representative will meet patients based on having previous difficulty connecting with patients to establish a face to face relationship. The RAE assists with coordinating care once the patient returns into the community, assuring they are attending their follow up appointments.

This experience will contribute to the success of our proposed intervention moving forward. We are already accustomed to collaborating with the RAE and addressing complex needs for our patients. This robust system of addressing complex patient needs will ensure that we can be successful with this intervention without delay.

8.

a. Is this an existing intervention in use within the hospital (“existing interventions” are those interventions the hospital has implemented or is implementing on the day it submits the Hospital Application)?
b. If yes, please use the space below to explain how the following criteria for leveraging existing interventions is satisfied (the response may reference answers above):

- The hospital must demonstrate that the use of the existing intervention is the best approach for meeting the needs of the community identified during the Community and Health Neighborhood Engagement process.
- The hospital must demonstrate that the project will be enhanced to meet HTP goals.

Response (Please respond as applicable; Please seek to limit the response to 1,000 words or less)

Complex case rounds are an existing intervention that Castle Rock Adventist Hospital will continue to utilize and will enhance to meet the requirements of the HTP. The intervention, once enhanced, will meet the community’s identified needs of understanding social needs, chronic conditions, behavioral health, and high utilization/ inappropriate unitization of acute care services. As discussed in the review of the literature to support this intervention, collaboration with key stakeholders (i.e. the RAE) by addressing multiple reasons for readmission in a complex care program has significant advantages for reducing readmissions and improving patient health outcomes.

We plan to enhance our current complex case rounds by including the RAE as a required participant in our case reviews. Other community partners are welcome to participate as necessary if the appropriate confidentiality agreements are signed. A standardized prioritization algorithm will be created, or a validated tool chosen, for selecting the patients most in need of such reviews. The algorithm or tool will take into consideration the likelihood of readmission, chronic conditions, behavioral health concerns, and social needs. This will allow us to pick patients who would most benefit from our efforts. Additionally, we will consider a template for reviewing the patient and planning for discharge to be used during conversations with the RAE and investigate documenting the plan in the EHR.

9.

a. Will the intervention be a joint effort with another organization (e.g., a Regional Accountable Entity, Local Public Health Agency, a mental or community health center, another community organization or any other external organization)?

☐ Yes
☐ No

Partnerships are not required, but, if the hospital will partner, please complete the remainder of this question and provide the required documentation (see subpart c).

b. If yes, please complete the following chart, including listing the partner organization; listing the type of organization; indicating whether the hospital has previously partnered with the organization; and providing a high-level summary of the expected role of the organization in intervention’s leadership and implementation.
The Colorado Healthcare Affordability and Sustainability Enterprise (CHASE) is a government-owned business within the Department of Health Care Policy and Financing.

www.colorado.gov/hcpf

c. Please also submit documentation of the partnership with each listed organization. Documentation may be provided separately for each organization listed above and could include: a contract; a memorandum of understanding; a business association agreement; a Letter of Partnership from the listed organization(s); or similar documentation. If a Letter of Partnership is provided, in it the organization should: (1) acknowledge that it intends to partner; (2) provide a brief description of the organization; (3) express agreement with the planned intervention; and (4) express agreement with the planned role it will have in leadership and implementation of the intervention as expressed above. The letter should be signed by a member of the organization’s management and submitted with this application in the same .pdf document. The Letter of Partnership Template can be found on the HTP webpage.

<table>
<thead>
<tr>
<th>Partner Organization Name</th>
<th>Type of Organization</th>
<th>Does the hospital have any previous experience partnering with this organization? (Yes or No)</th>
<th>Organization’s Role in Intervention Leadership and Implementation (high-level summary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado Access</td>
<td>Regional Accountable Entity (RAE)</td>
<td>Yes</td>
<td>Attend case reviews and assist in comprehensive discharge planning.</td>
</tr>
</tbody>
</table>
Hospital Transformation Program

Intervention Proposal

I. Background Information

This Intervention Proposal is designed to clearly articulate the scope and goals of proposed transformation interventions aimed at impacting the hospital’s selected local quality measures under the HTP. The following questions are meant to assist the state in identifying: the evidence base for each intervention; the need within targeted communities for the implementation of the interventions; and how the interventions will advance the goals of the HTP.

Hospitals will not be required to implement a specified number of interventions. Instead, participation requirements are based on the selection of local quality measures to impact within the five HTP Focus Areas:

• Reducing Avoidable Hospital Utilization
• Core Populations
• Behavioral Health and Substance Use Disorders
• Clinical and Operational Efficiencies
• Community Development Efforts to Address Population Health and Total Cost of Care

Hospitals will be required to address statewide measures for each Focus Area. Hospitals will also be required to select from the HTP list of local measures across the five Focus Areas based on community needs and the goals of the HTP. Each hospital will be required to work on a set of measures equal to 100 points. The number, mix and points per measure will vary according to hospital size, defined by bed count or specialty type:

• Large hospitals (91+ beds) will be accountable for six statewide measures, totaling 60 points and a minimum of four local measures, which will account for 40 points. Points per local measure will equal 40 divided by the number of local measures selected.
• Medium hospitals (26-90 beds) will be accountable for six statewide measures and a minimum of two local measures. If two local measures are selected, statewide measures will total 75 points, and local measures will account for 25 points. Points per local measure will equal 25 divided by the number of local measures selected. If three local measures are selected, then statewide measures will total 67 points and local measures will account for 33 points. Points per local measure will equal 33 divided by the number of local measures selected. If four or more local measures are selected, then statewide measures will then total 60 points and local measures will account for 40 points. Points per local measure will equal 40 divided by the number of local measures selected for four or more local measures.
• Small hospitals (<26 beds) excluding critical access hospitals will be accountable for six measures (statewide or local) to account for 100 points. Points per each measure will equal 100 divided by the number of measures selected.
• Critical access hospitals will be accountable for six measures (statewide or local) and will have their risk for measures reduced by 40%.
- Pediatric hospitals will be accountable for five statewide measures, totaling 50 points and a minimum of five local measures, which will account for 50 points. Points per local measure will equal 50 divided by the number of local measures selected.
- Respiratory specialty hospital(s) will be accountable for four statewide measures and a minimum of four local measures. If four measures are selected then statewide measures will total 56 points and local measures will account for 44 points. Points per local measure will equal 44 divided by the number of local measures selected. If five or more measures are selected, then statewide measures will total 50 points and local measures will total 50 points. Points per local measure will equal 50 divided by the number of local measures selected.

Hospitals have the option to work on local measures beyond the required minimum. This would spread the local measure risk by reducing the points per local measure.

In addition, hospitals have the option to replace a local measure with a statewide priority. Each statewide priority will be worth 20 points and if selected the points for each remaining local measure will be equal to the remaining total required local measure points divided by the number of local measures, greatly reducing the risk associated with those measures.

Hospitals should consult the Measure Scoring Summary, which can be found on the HTP webpage, for more information about measure selection, requirements and scoring.

Hospitals must then design five-year interventions that will impact their selected quality measures.

Hospitals must demonstrate that their proposed interventions will fulfill the goals of the HTP and are evidence-based. They must also justify the selection of each intervention based on the findings of the Community and Health Neighborhood Engagement process, including the environmental scan and feedback.

Each hospital will need to report its own data and submit its own application, but partnerships between hospitals may occur in some instances.

Hospitals may leverage existing resources for interventions, and existing interventions may be considered insofar as they expand or enhance the Department’s noted goals and meet the following criteria:

- The hospital must demonstrate that the existing intervention is being selected because it is the best approach for meeting the needs of the community identified during the Community and Health Neighborhood Engagement process.
- The hospital must demonstrate that the intervention can and will be enhanced to meet HTP goals.

In addition to meeting the above criteria, any hospital proposing existing interventions for participation in the HTP will be expected to propose and implement accelerated milestones in the Implementation Plan for such interventions.

This Intervention Proposal must be completed separately for each of the interventions being proposed for inclusion in the HTP. Hospitals must submit interventions that, together, address all of the statewide quality measures and the local quality measures listed in the hospital’s response to Question 6 in the Hospital Application.
II. Overview of Intervention

1. Name of Intervention: Implement standardized assessment and referral for social needs

2. Please use the table below to identify which statewide and selected local quality measures (from the hospital’s response to Question 6 in the Hospital Application) the hospital will address through this intervention. As a reminder, each of the statewide and selected local quality measures must be identified for at least one intervention. As such, if this is the only intervention addressing a given Focus Area, all statewide quality measures and all selected local quality measures for that Focus Area must be included in this response. This response should align with the intervention-specific list included in the response to Question 7 in the Hospital Application.

Please note, hospitals are also required to complete the Intervention Proposal below for statewide priorities identified in Question 6 of the HTP Hospital Application.

Please use the unique identification code from the Performance Measures List (which is available on the HTP website) to identify your selected measures. For example, the measure “30 Day All Cause Risk Adjusted Hospital Readmission” should be listed as SW-RAH1.

Response (Please format the response as a numbered list)
1. SW-CP1
2. SW-RAH1
3. CP1

3. Please use the space below to describe the intervention and the rationale for its selection. Responses should include:
   • A description of the intervention; and
   • How the intervention advances the goals of the HTP.

Response (Please seek to limit the response to 1,000 words or less)
• A description of the intervention.

To achieve our goal of screening for social needs, Castle Rock Adventist Hospital plans to utilize the questions already formatted in our electronic health record, Epic, to screen patients for social needs and inform the Regional Accountable Entity (RAE) and/or applicable community-based organization(s) of positive screens. Epic currently has questions explicitly addressing four of the five domains outlined in the HTP measures overview: food insecurity, transportation problems, utilities, and interpersonal safety (specifically, domestic violence). Epic plans to add questions addressing housing needs. Once these housing questions are added, our social needs screening tool will address all five required domains. Additional questions are also provided in Epic covering the topics of substance use, mental health, physical activity, social supports, and stress. Castle Rock Adventist Hospital will need to determine which of the questions to use for our intervention.

We hope to screen every admitted patient and will explore options that will allow us to administer the assessment via our patient portal. Every positive screen will be eligible for the case management team to follow-up with the patients by offering resources and discussing options. Furthermore, every patient with a positive screen will have their information sent to the RAE designated in their medical chart and/or appropriate community-based organization(s). This will ensure that the appropriate
agency can follow-up to provide additional supports and interventions that will help the individual meet their needs.

For those patients who have had a social needs screening within the last twelve months and the documentation is available in Epic, we will plan for staff to verify with the patient that the information has not changed. Case management will still be available to talk with the patient and those who had a previous positive screen in the last twelve months will still be referred to a community-based organization and/or RAE for additional intervention.

We also hope to implement the ICD-10-CM coding for Social Determinants of Health. The American Hospital Association Coding Clinic recommended the use of code categories Z55-Z65. ICD-10-CM Cooperating Parties approved the adoption of these codes and they have been incorporated in the Official Coding Guidelines. Utilizing these codes will allow our health system to map social needs by routinely documenting interventions provided by non-physician providers, such as our care coordination team. Each Z-code has a category that is matched to a sub-problem/risk factor associated with that domain. These codes effectively identify problems relating to education and literacy, to environmental hazards, and psychosocial circumstances. Capturing this information routinely will help us modify our care coordination interventions to better meet the need of our patients, while also allowing us to transfer more accurate data to our community partners.

In our electronic health record, the social needs information is fed into a graphic display for ease of understanding by the care team. This is referred to as a “wheel,” which has several sections, each representing a different social need. If a need is identified, the corresponding section of the wheel is colored red. If a patient does not have any identified needs for a certain domain, that section of the wheel is colored green. At this time, the wheel is linked to the Aunt Bertha resource platform, which allows users to enter their zip code and find helpful resources in their community. As this platform does not currently meet the needs of our patient population, Centura will explore options for enhanced robust resource referral platforms and an ideal process for connecting patients to resources.

- How the intervention advances the goals of the HTP.

This intervention meets all five of the HTP goals.

1. Specifically, it will assist with improving patient outcomes through care redesign and integration of care across settings. Castle Rock Adventist Hospital plans to introduce a new process to screen for social needs and integrate care of those patients who screen positive with the RAE and/or community organizations who can then provide more specialized interventions for those identified needs in a different setting, either in outpatient behavioral health or medical offices, or in the patient’s home.

2. This intervention could also improve the patient experience in the delivery system by ensuring appropriate care in appropriate settings. By screening for needs in the hospital and referring to community resources, patients will be able to have their needs met outside of the acute care setting, which is not as well equipped as other organizations to provide assistance.

3. Furthermore, this new intervention could help lower Health First Colorado costs through reductions in avoidable hospital utilization and increased effectiveness and efficiency in care delivery. Identifying these needs and referring to the RAE and/or community organizations for them
to be addressed could help decrease unnecessary ED visits and readmissions, thereby saving money for the Health First Colorado program.

4. Also, there is potential for this intervention to accelerate Castle Rock Adventist Hospital’s organizational, operational, and systems readiness for value-based payment as screening for social needs could help improve patient outcomes.

5. Finally, this process will increase collaboration between Castle Rock Adventist Hospital and RAEs or other community organizations. Patient data for all those who screen positive on the social needs screening will be sent to the RAE and/or the appropriate community organization(s) for them to review and intervene.

4. Please use the space below to describe how the intervention and any selected local quality measures to be addressed by the intervention align with community needs identified throughout the Community and Health Neighborhood Engagement process (including data identified in the hospital’s CHNE midpoint and final reports), including but not limited to:

• How the intervention and any selected local quality measures to be addressed by the intervention were selected based on identified community needs, including how they align with identified significant behavioral and physical health needs and/or service capacity resources and gaps, including related to care transitions and social determinants of health;
• How the population of focus aligns with identified community needs; and
• How the proposed intervention will leverage available medical and/or social resources and partners.

Response (Please seek to limit the response to 1,500 words or less)

• How the intervention and any selected local quality measures to be addressed by the intervention were selected based on identified community needs, including how they align with identified significant behavioral and physical health needs and/or service capacity resources and gaps, including related to care transitions and social determinants of health.

This intervention and the measures addressed by it align with the community needs that were identified during our Community and Health Neighborhood Engagement (CHNE) process and our overlapping Community Health Implementation Plan process. One of the top priorities identified by our community was social needs, specifically stable, affordable housing and food security. Untreated or undiagnosed behavioral health conditions were also a priority as it is seen as a driver for overutilization of health and poor health outcomes. Both behavioral health and housing needs are brought together in the community’s concern for mothers with substance use concerns looking for family-friendly sober living. There was also a concern expressed for maternal and perinatal depression, which could be compounded when pregnant women are not connected to appropriate prenatal care. In the Denver metro area, about 8.9% of women report perinatal depression symptoms after their babies are born. The community also worries that there is a link between not enough providers accepting Medicaid and the use of the ED for non-emergency care.

Social needs were mentioned in many ways during our CHNE process. As mentioned previously, housing was a major concern for the community. In the Denver area, about one-quarter of the residents use half or more of their income to pay rent. The steep cost of housing can lead to instability in family life, making other necessities difficult to provide. An increase in rent could result in a family needing to relocate after years of establishing social connections and community in a
neighborhood. Homelessness is also a big concern for our community. Some expressed concern that individuals experiencing homelessness utilize the ED simply because it is a safe place for them to stay. For those experiencing mental illness or substance use disorders, employment can be difficult to find and maintain, leading to financial difficulties and an undue burden of stress. Some in the Denver area may also experience limited healthy food options, either because they do not live near grocery stores or because the cost is prohibitive. Those who are elderly face unique social needs in that transportation can be a barrier for them getting to appointments and palliative care can be difficult to finance.

Access to healthy affordable food can be a barrier for many in our community, especially when personal transportation is not an option and the cost of healthy foods can be a limiting factor, compounded with other costs of living. Many people in our community are eligible but not enrolled in available supplemental resources such as the Supplemental Nutrition Assistance Program (SNAP) and have difficulty navigating the emergency food security resources in their communities.

Some of the behavioral needs specifically affecting our community include depression and substance use disorders. Thirty percent of Denver-area youth report feeling sad or hopeless almost every day for two or more weeks in a row that they stopped some of their normal activities and 16% seriously considered suicide in a 12-month period. About 8.8% of care seeking youth and 11.1% of care seeking adults in the Denver metro area have been diagnosed with depression. Substance use is also a big concern for our community. Alcohol abuse is the most common APR DRG diagnosis for Medicaid hospital admissions among enrollees identified as high utilizers living in RAES 5 and 6 and the sixth highest in RAES 3. About 19.4% of Denver metro adults binge drink and 16.9% of high schoolers report having binge drank at some point.

Regarding physical health needs, our community is most concerned with overweight and hypertension. In the Denver metro region, two-thirds of adults are overweight and 14.9% of adults have been diagnosed with hypertension.

The capacity of the current care system has come up as a big concern. In the Denver metro area, there are 83.3 PCPs per 100,000 residents. However, not every provider accepts Medicaid and not every PCP is willing to take on more complex cases, which could lead to Medicaid members using the ED for conditions that could otherwise have been treated in the outpatient setting. Where a Medicaid member can see a primary care provider, there are not always co-located social service providers to help with social needs by assisting with benefits such as SNAP or WIC enrollment. Spanish speakers or speakers of languages other than English could have an especially difficult time finding a provider. Prenatal care is also uniquely difficulty, especially finding one that offers appointments outside of traditional business hours to accommodate the mother’s work schedule.

Our proposed intervention of screening for social needs and referring to resources aligns with our community’s feedback and could have the potential to lower unnecessary healthcare utilization. Individuals with unstable or no housing are more likely to utilize the ED. Therefore, it stands to reason that referring for housing assistance would reduce unnecessary ED visits. Offering referrals for transportation to and from medical appointments could mean that individuals with chronic conditions will have their needs met in the often more appropriate outpatient setting leading to fewer ED visits. One of our community’s highest priorities was the social needs that so many individuals face. This intervention will allow us to begin that conversation with patients in the hospital and offer ongoing supports after hospitalization through a referral to the RAE and/or the appropriate community organization(s), which can follow the patient long-term in the community.
- How the population of focus aligns with identified community needs.

Castle Rock Adventist Hospital’s population of focus will be adults with Medicaid who have identified social needs. The information for any patient with a positive screen will be referred to the RAE that the patient belongs to or an applicable community organization(s). Our CHNE identified the needs of this population in our community, as outlined above. However, our current system has not placed a priority on the social needs findings and effectively utilizing resources in the community that address the needs specifically. Accurate identification and collaboration to use existing resources and innovation to create new resources to understand these needs will be imperative to this intervention.

- How the proposed intervention will leverage available medical and/or social resources and partners.

This intervention will take advantage of several key medical and social resources. First, Castle Rock Adventist Hospital plans to leverage our relationship with our RAE by sending referral information to them and/or the applicable community organization(s) for follow-up. Our hospital sees patients from all over the state of Colorado, many of whom do not belong to the RAE with jurisdiction in our geographic region. Therefore, we plan to identify the RAE the member belongs to, regardless of whether that is outside of our geographic region. This will ensure that the patient will have follow-up that is appropriate to their own living situation and be put in touch with providers located in their own communities. The RAE is more knowledgeable of what resources are available to their members than is the hospital as that is their area of expertise. By referring to the RAE we are providing the best possible care for the patient.

Social resources specific to Castle Rock Adventist Hospital include a monthly “Mommy and Me” market that is geared to low income mothers of children of all ages to find free clothing, diapers, and other needs. We also support a new mothers group that is led by a volunteer and is held monthly.

Castle Rock Adventist also utilizes a ride share program with Uber to provide transportation to those with transportation needs to and from the hospital.

5. Please identify the evidence base (academic, professional or otherwise) related to this intervention’s use among the target population by selecting one of the following options:

(1) Randomized Control Trial (RCT) level evidence
(2) Best practice supported by less than RCT evidence
(3) Emerging practice
(4) No evidence

If you selected option 1, 2 or 3 above, please use the space below to summarize the evidence base (academic, professional or otherwise) related to this intervention’s use among the target population. The response should address the intervention’s ability to impact the selected local and statewide quality measures identified in Question 6 in the Hospital Application. Please submit the response in narrative form and provide links to any reference documentation (data, citations, etc.).

If you selected option 4 indicating that there is no known evidence base, please explain why this intervention is being proposed regardless.

The Colorado Healthcare Affordability and Sustainability Enterprise (CHASE) is a government-owned business within the Department of Health Care Policy and Financing. www.colorado.gov/hcpf
Response (Please seek to limit the response to 1,500 words or less)

(2) Best practice supported by less than RCT evidence

A plethora of research exists to show that living conditions and social factors affect health outcomes. According to County Health Rankings, only 20% of health outcomes are related to actual clinical care (Booske et. al, 2010). Most health outcomes are correlated with social and economic factors (40%), health behaviors (30%), and environmental factors (10%). Healthy People.gov explains, “Our health is also determined in part by access to social and economic opportunities; the resources and supports available in our homes, neighborhoods, and communities; the quality of our schooling; the safety of our workplaces; the cleanliness of our water, food, and air; and the nature of our social interactions and relationships. The conditions in which we live explain in part why some Americans are healthier than others and why Americans more generally are not as healthy as they could be” (https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health). Therefore, it would stand to reason that identifying social needs in patients and referring to those equipped to address those concerns would lead to improved health outcomes, reduced readmissions, less healthcare utilization, and cost savings for insurers.

One quasi-experimental study showed that high utilizers who were screened for social needs and provided with assistance to navigate resources showed a 12.1% decrease in health care utilization among those who were Medicaid members (Schickedanz, 2019). Another study found that individuals with self-identified social needs such as housing, transportation, food, and financial resources had 68% higher odds of readmission within 30 days of discharge from an inpatient stay than those without self-identified social needs (Emechebe et. al, 2019). The Commonwealth Fund reviewed evidence from a multitude of programs addressing social determinants of health needs and found significant cost savings for programs that not just identified needs, but addressed them (Tsega et.al, n.d.). For example, providing housing for those who are homeless or at risk of homelessness and ensuring access to healthy food reduced healthcare utilization and lead to substantial cost savings for Medicare and Medicaid. They also found moderate evidence for increasing transportation resources and a return on investment for health care agencies.

The Robert Wood Johnson Foundation partnered with two other healthcare organizations to look at case studies of hospitals with strong community partnerships as a way to improve a culture of health which they described as a society that allows for equal access to healthy living regardless of social determinants and other vulnerabilities (Health Research & Education Trust, 2017). One such case involved Sharp HealthCare in San Diego, CA. Sharp HealthCare Partnered with 2-1-1 to provide patients with general referral information, assistance with benefits enrollment, and care coordination for vulnerable populations. They also worked to assess the risk of patients to better assist them. As a result, 36% of patients referred to 2-1-1 for food insecurity reported decreased food vulnerability and patients had improved health-efficacy with 95% reporting confidence in their health management plans.

No evidence-based tools for screening multiple domains of social needs have been rigorously tested for validity and reliability, but tools do exist which have undergone some testing. One popular tool is the Protocol for Responding to and Assessing Patient Assets, Risks, and Experiences (PRAPARE). This questionnaire asks about patient demographics such as military service, primary language, and migrant farm work; living situation; education; employment; insurance; finances; food; transportation; social and emotional health; personal safety; refugee status; and time spent in jail. This tool was developed using Walsh and Betz’s (1995) “Gold Standard” for the creation of tools.
Another well-known tool is the Accountable Health Communities Health-Related Social Needs Screening Tool (AHC). The shorter, 10-item AHC questionnaire addresses five core domains: housing instability, food insecurity, transportation problems, utility help needs, and interpersonal safety. There is also a longer form which includes questions on financial strain, employment, family and community support, education, physical activity, substance use, mental health, and disabilities. This tool is currently being tested across the country in Accountable Health Communities using the ten core domain questions with the option to add the other domains. Many of the questions are based on some level of evidence. For example, the checklist of problems with the place where the respondent lives was taken from the authors of an article on how to make social determinants screening routine in healthcare (Nuruzzaman et al., 2015), the two questions about food security are validated in a study by Hager et al. (2010), the question about utilities is based on the findings from Cook et al. (2008) that households with greater energy insecurity are more likely to experience food insecurity and a caregiver was more likely to report their child was in poorer health, and the interpersonal violence questions come from the HITS tool which is a reliable and valid tool for identifying domestic violence (Sherin et al., 1998); the questions were adapted for the AHC tool to address general interpersonal violence (Billioux, A. et al., 2017).

As stated above, Castle Rock Adventist Hospital utilizes Epic for our electronic health record. Epic already has questions for social needs screening embedded in their system that can be used by our facility and these questions do not follow any one specific screening tool. Castle Rock Adventist Hospital does not have input into how those questions were chosen by Epic to be included in the tool, but Epic does have a robust system of validation with clinical partners to make those decisions (Email communication with Jana Kaschinske, October 21, 2019.). For the food insecurity and transportation needs questions, they had a dedicated Social Determinants of Health Brain Trust, which included clinicians and executives from several healthcare organizations who reviewed and decided on the questions. The remaining domains were based on literature recommendations from the National Academy of Medicine (Institute of Medicine, 2014; Email communication with Jana Kaschinske, October 21, 2019.). Four of the five HTP required domains are covered by the existing Epic questions including food insecurity, transportation, utilities, and personal safety. The two questions addressing food insecurity were developed and found to be a valid assessment of food needs by Hager et al. (2010), these are the same questions found in the AHC questionnaire. The four questions on personal safety come from the HARK tool used to identify women experiencing intimate partner violence within the last year; it has been found to have reasonable sensitivity and specificity (Sohal, Eldridge, and Feder, 2007). Finally, the transportation questions use similar language to those in the PRAPARE tool. Additional domains are covered by the Epic questions and each of them is supported by literature, many have wording similar to either the AHC or PRAPARE questionnaires. Additional questions will be added by Epic in Spring of 2020 which will address housing needs.

In conclusion, social needs have been linked to poorer health outcomes, higher healthcare utilization, and readmissions. Screening for and identifying social needs among inpatient Medicaid recipients who are discharged to home by utilizing questions based in literature will allow us to take steps to address those needs and hopefully improve outcomes, reduce readmission rates, and lower Medicaid costs. Furthermore, this will increase our collaboration with the RAE and other community organizations by sending them our patient information so that they can initiate the appropriate interventions.

SOURCES:


12. Email communication with Jana Kaschinske, October 21, 2019.


6. a. Does the focus of the proposed intervention intersect with ongoing initiatives statewide (including, but not limited to those included in the ACC, State Innovation Model and Comprehensive Primary Care Plus)?
   ✔ Yes
   ☐ No

b. If yes, please identify the applicable statewide initiative(s): (you may select more than one response from the list below)
   - Behavioral Health Task Force
   - Affordability Road Map
   - IT Road Map
   - HQIP
   - ACC
   - SIM Continuation
   - Rx Tool
   - Rural Support Fund
   - SUD Waiver
   - Health Care Workforce
   - Jail Diversion
   - Crisis Intervention
   - Primary Care Payment Reform
   - Other: ___ (please identify)

Please also use the space below to briefly explain how the hospital will ensure the intervention aligns with the applicable ongoing initiative(s).

Response (Please seek to limit the response to 750 words or less)
IT Road Map, ACC

This social needs screening and referral intervention intersects with the state’s IT Road Map and the Accountable Care Collaborative model. We hope to find an IT solution to refer all positively screened patients to the RAE. Such automated screening will not only increase efficiency in the health care system, but also provide opportunities for improved care coordination. The RAE will be notified of every one of their members who screens positive for social needs and be able to respond as appropriate. Such collaboration with the RAE will allow for high-performing, cost-effective solutions to complex, high needs situations while also serving to improve both member and provider experience.

7. Please use the space below to explain any experience the hospital or any affiliated community partners have had with this type of intervention or target population and how that experience will support the success of the intervention.

Response (Please seek to limit the response to 500 words or less)

This will be a new intervention for Castle Rock Adventist Hospital. Social needs screening has been piloted at other Centura sites, including a mix of rural and urban outpatient clinics and one inpatient unit at St. Anthony North Health Campus. The outpatient clinics continue to utilize the assessment, but St. Anthony North Health Campus is not currently screening patients for social needs. The lessons learned throughout the term of the pilot study and the ongoing experience of the outpatient clinics will guide the implementation of our intervention throughout the Hospital Transformation Program.

Centura hospitals have already learned a lot from this pilot program. For example, using pen and paper to assess is cumbersome, but utilizing a tablet is also not ideal. Castle Rock Adventist Hospital will have to find a means of administering the screening questions that makes the most sense for our patients and staff. Additionally, patients were originally being screened at every single visit, even if they were seen just the week before. Not only was this unnecessary, but it decreases patient satisfaction to repeat questions that they already answered.

8. 

a. Is this an existing intervention in use within the hospital (“existing interventions” are those interventions the hospital has implemented or is implementing on the day it submits the Hospital Application)?

☐ Yes
☒ No

b. If yes, please use the space below to explain how the following criteria for leveraging existing interventions is satisfied (the response may reference answers above):

- The hospital must demonstrate that the use of the existing intervention is the best approach for meeting the needs of the community identified during the Community and Health Neighborhood Engagement process.
- The hospital must demonstrate that the project will be enhanced to meet HTP goals.

Response (Please respond as applicable; Please seek to limit the response to 1,000 words or less)

This is not an already existing intervention used in our hospital. As mentioned previously, Centura did pilot social needs screening in some outpatient clinics that continue to use the tool and at an
inpatient setting at our St. Anthony North Health Campus facility which is not currently screening. This will be a new intervention for our hospital, and we will take into consideration the lessons learned during the pilot study.

9. 
   a. Will the intervention be a joint effort with another organization (e.g., a Regional Accountable Entity, Local Public Health Agency, a mental or community health center, another community organization or any other external organization)?
      ☐ Yes
      ☒ No

    Partnerships are not required, but, if the hospital will partner, please complete the remainder of this question and provide the required documentation (see subpart c).

    b. If yes, please complete the following chart, including listing the partner organization; listing the type of organization; indicating whether the hospital has previously partnered with the organization; and providing a high-level summary of the expected role of the organization in intervention’s leadership and implementation.

    | Partner Organization Name | Type of Organization | Does the hospital have any previous experience partnering with this organization? (Yes or No) | Organization’s Role in Intervention Leadership and Implementation (high-level summary) |
    |---------------------------|----------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
    | N/A                      | N/A                  | N/A                                                                                          | N/A                                                                             |
    |                           |                      |                                                                                               |                                                                                 |
    |                           |                      |                                                                                               |                                                                                 |
    |                           |                      |                                                                                               |                                                                                 |

    c. Please also submit documentation of the partnership with each listed organization. Documentation may be provided separately for each organization listed above and could include: a contract; a memorandum of understanding; a business association agreement; a Letter of Partnership from the listed organization(s); or similar documentation. If a Letter of Partnership is provided, in it the organization should: (1) acknowledge that it intends to partner; (2) provide a brief description of the organization; (3) express agreement with the planned intervention; and (4) express agreement with the planned role it will have in leadership and implementation of the intervention as expressed above. The letter should be signed by a member of the organization’s management and submitted with this application in the same .pdf document. The Letter of Partnership Template can be found on the HTP webpage.
Hospital Transformation Program

*Intervention Proposal*

**I. Background Information**

This Intervention Proposal is designed to clearly articulate the scope and goals of proposed transformation interventions aimed at impacting the hospital’s selected local quality measures under the HTP. The following questions are meant to assist the state in identifying: the evidence base for each intervention; the need within targeted communities for the implementation of the interventions; and how the interventions will advance the goals of the HTP.

Hospitals will not be required to implement a specified number of interventions. Instead, participation requirements are based on the selection of local quality measures to impact within the five HTP Focus Areas:

- Reducing Avoidable Hospital Utilization
- Core Populations
- Behavioral Health and Substance Use Disorders
- Clinical and Operational Efficiencies
- Community Development Efforts to Address Population Health and Total Cost of Care

Hospitals will be required to address statewide measures for each Focus Area. Hospitals will also be required to select from the HTP list of *local measures* across the five Focus Areas based on community needs and the goals of the HTP. Each hospital will be required to work on a set of measures equal to 100 points. The number, mix and points per measure will vary according to hospital size, defined by bed count or specialty type:

- **Large hospitals** (91+ beds) will be accountable for six statewide measures, totaling 60 points and a minimum of four local measures, which will account for 40 points. Points per local measure will equal 40 divided by the number of local measures selected.
- **Medium hospitals** (26-90 beds) will be accountable for six statewide measures and a minimum of two local measures. If two local measures are selected, statewide measures will total 75 points, and local measures will account for 25 points. Points per local measure will equal 25 divided by the number of local measures selected. If three local measures are selected, statewide measures will total 67 points and local measures will account for 33 points. Points per local measure will equal 33 divided by the number of local measures selected. If four or more local measures are selected, then statewide measures will then total 60 points and local measures will account for 40 points. Points per local measure will equal 40 divided by the number of local measures selected for four or more local measures.
- **Small hospitals** (<26 beds) excluding critical access hospitals will be accountable for six measures (statewide or local) to account for 100 points. Points per each measure will equal 100 divided by the number of measures selected.
- **Critical access hospitals** will be accountable for six measures (statewide or local) and will have their risk for measures reduced by 40%.
• Pediatric hospitals will be accountable for five statewide measures, totaling 50 points and a minimum of five local measures, which will account for 50 points. Points per local measure will equal 50 divided by the number of local measures selected.
• Respiratory specialty hospital(s) will be accountable for four statewide measures and a minimum of four local measures. If four measures are selected then statewide measures will total 56 points and local measures will account for 44 points. Points per local measure will equal 44 divided by the number of local measures selected. If five or more measures are selected, then statewide measures will total 50 points and local measures will total 50 points. Points per local measure will equal 50 divided by the number of local measures selected.

Hospitals have the option to work on local measures beyond the required minimum. This would spread the local measure risk by reducing the points per local measure.

In addition, hospitals have the option to replace a local measure with a statewide priority. Each statewide priority will be worth 20 points and if selected the points for each remaining local measure will be equal to the remaining total required local measure points divided by the number of local measures, greatly reducing the risk associated with those measures.

Hospitals should consult the Measure Scoring Summary, which can be found on the HTP webpage, for more information about measure selection, requirements and scoring.

Hospitals must then design five-year interventions that will impact their selected quality measures.

Hospitals must demonstrate that their proposed interventions will fulfill the goals of the HTP and are evidence-based. They must also justify the selection of each intervention based on the findings of the Community and Health Neighborhood Engagement process, including the environmental scan and feedback.

Each hospital will need to report its own data and submit its own application, but partnerships between hospitals may occur in some instances.

Hospitals may leverage existing resources for interventions, and existing interventions may be considered insofar as they expand or enhance the Department’s noted goals and meet the following criteria:

• The hospital must demonstrate that the existing intervention is being selected because it is the best approach for meeting the needs of the community identified during the Community and Health Neighborhood Engagement process.
• The hospital must demonstrate that the intervention can and will be enhanced to meet HTP goals.

In addition to meeting the above criteria, any hospital proposing existing interventions for participation in the HTP will be expected to propose and implement accelerated milestones in the Implementation Plan for such interventions.

This Intervention Proposal must be completed separately for each of the interventions being proposed for inclusion in the HTP. Hospitals must submit interventions that, together, address all of the statewide quality measures and the local quality measures listed in the hospital’s response to Question 6 in the Hospital Application.
II. Overview of Intervention

1. Name of Intervention: Implement standardized collaborative care process for behavioral health

2. Please use the table below to identify which statewide and selected local quality measures (from the hospital’s response to Question 6 in the Hospital Application) the hospital will address through this intervention. As a reminder, each of the statewide and selected local quality measures must be identified for at least one intervention. As such, if this is the only intervention addressing a given Focus Area, all statewide quality measures and all selected local quality measures for that Focus Area must be included in this response. This response should align with the intervention-specific list included in the response to Question 7 in the Hospital Application.

Please note, hospitals are also required to complete the Intervention Proposal below for statewide priorities identified in Question 6 of the HTP Hospital Application.

Please use the unique identification code from the Performance Measures List (which is available on the HTP website) to identify your selected measures. For example, the measure “30 Day All Cause Risk Adjusted Hospital Readmission” should be listed as SW-RAH1.

Response (Please format the response as a numbered list)

1. SW-BH1
2. SW-RAH1
3. SW-CP1
4. BH2
5. CP6

3. Please use the space below to describe the intervention and the rationale for its selection.

Responses should include:
- A description of the intervention; and
- How the intervention advances the goals of the HTP.

Response (Please seek to limit the response to 1,000 words or less)

• A description of the intervention.

To improve outcomes for patients suffering from behavioral illness, including both mental illness and substance use disorders, and prevent behavioral health-related readmissions, Castle Rock Adventist Hospital plans to create and implement standardized Collaborative Practice Guidelines.

A multidisciplinary team will be tasked with creating a Collaborative Practice Guideline that caregivers can use. Such guidelines are common in healthcare practice and afford more flexibility to staff when treating patients with common complaints. For example, many healthcare systems have collaborative practice guidelines for chest pain: when a patient presents to the emergency department complaining of chest pain, the nurse may offer the patient an Aspirin without an order from the provider after completing the initial assessment. The benefits of providing the Aspirin far outweigh any potential risks that could be incurred by the patient and so the nurse is encouraged to act in accordance with the guidelines. Within the Centura system, several examples of collaborative guidelines...
practice guidelines are currently in use within the Emergency Department setting. For example, Castle Rock Adventist Hospital utilizes the following existing Collaborative Practice Guidelines:

- Pain and Nausea
- Allergic Reaction
- Closed head injury
- Sepsis
- Asthma/COPD
- Pneumonia
- Chest pain
- Stroke
- Seizure
- Altered mental status
- Sepsis
- Pediatric fever, nausea, vomiting, diarrhea, pharyngitis, respiratory
- Epistaxis
- Pharyngitis
- Chest or abdominal trauma
- Laceration or wound
- Shortness of breath
- Gastrointestinal bleed
- Urinary tract infection
- Overdose
- Suicidal ideation
- Alcohol intoxication
- Abdominal Pain
A multidisciplinary group, with input from appropriate stakeholders, will be responsible for creating and approving behavioral health Collaborative Practice Guidelines for Castle Rock Adventist Hospital and the entire Centura hospital system. The guidelines will potentially contain information for the treatment of three categories of patients: suicidality, substance use, and any other behavioral health diagnoses, but additional categories could be added as deemed necessary. The team will also identify elements to go into the guidelines such as patient education materials, resources, and discharge instructions as necessary. The guidelines will include a referral process to the patient’s assigned RAE for anyone with a primary or secondary behavioral health diagnosis, which will allow for greater coordination of care and follow-up in the community. The RAEs will also be invited to review and offer feedback on the guidelines before they are finalized to ensure optimal collaboration.

This intervention will mainly impact the SW-BH1 measure in that it will directly fulfill the requirements stated in the measure specifications. However, it will also affect measures BH2, CP6, SW-RAH1, and SW-CP1. For those patients who screen positive for anxiety or depression on the Edinburgh Depression Scale (measure CP6), they will likely be included in the target population for this measure and treated under the same guidelines. By referring all patients to the RAE to receive follow-up care as necessary, this intervention could also help reduce all-cause readmissions for patients who would otherwise not have received additional support. Social needs could also be addressed through referral to the RAE as many patients facing behavioral health challenges also report co-occurring social needs.

Several opportunities have been identified to implement this intervention and create a more reliable process. Within this intervention, Centura will:

- Create Collaborative Practice Guidelines for the treatment of common behavioral health complaints and identify the various components to be included in such guidelines.
- Cascade standardized clinical education to all pertinent staff regarding the new practice guidelines and actions needed to support a successful transition to RAE follow-up care.
- Explore the use of a referral system through our electronic health record to send patient information to the RAE in a manner that is not human dependent.

These milestones will be finalized and described in more detail in our implementation plan.

- How the Intervention advances the goals of the HTP:

This one collaborative practice guidelines intervention advances all five overarching goals of the HTP.

1. First, it will improve patient outcomes by a subtle, but essential redesign of our approach to behavioral health care in the creation of Collaborative Practice Guidelines. These will give more autonomy to our caregivers and formalize a system-wide response to behavioral health needs regardless of the severity.

2. Next, the intervention will improve the patient experience in the delivery system by referring patients to the most appropriate provider for behavioral health care, directing them to ongoing outpatient care, primary care offices, community mental health centers, crisis walk-in centers, hotlines, and other services better suited to meet their needs than the emergency department.
3. Additionally, by directing patients to more appropriate levels of care, this intervention aims to lower Health First Colorado costs by avoiding additional ED visits for needs that would better be treated in other settings and encouraging patients to receive ongoing outpatient care. Such care could help with symptom management and decrease the number of behavioral health crises that often precede ED visits.

4. Furthermore, implementing standardized Collaborative Practice Guidelines across our hospital will accelerate our readiness for value-based payment by moving toward a process that refers patients to the right level of care, which would improve patient outcomes and prevent future use of the ED or inpatient stays. By embedding such a referral into our electronic health record, we hope to transition from a human-dependent process of completing referrals to a more reliable forcing function.

5. Lastly, the intervention will create standardization in the notification process and improve communication across the continuum of care. This improved communication will increase collaboration between our hospital and the RAE, which will support the follow-up care after referral.

4. Please use the space below to describe how the intervention and any selected local quality measures to be addressed by the intervention align with community needs identified throughout the Community and Health Neighborhood Engagement process (including data identified in the hospital’s CHNE midpoint and final reports), including but not limited to:
   • How the intervention and any selected local quality measures to be addressed by the intervention were selected based on identified community needs, including how they align with identified significant behavioral and physical health needs and/or service capacity resources and gaps, including related to care transitions and social determinants of health;
   • How the population of focus aligns with identified community needs; and
   • How the proposed intervention will leverage available medical and/or social resources and partners.

Response (Please seek to limit the response to 1,500 words or less)
   • How the intervention and any selected local quality measures to be addressed by the intervention were selected based on identified community needs, including how they align with identified significant behavioral and physical health needs and/or service capacity resources and gaps, including related to care transitions and social determinants of health.

The intervention and the selected measures impacted by implementation align with the community needs that were identified during our Community and Health Neighborhood Engagement (CHNE) process. Our community’s most significant priority is behavioral health, including both mental health and substance use disorders. Stakeholders to our CHNE were acutely concerned by their understanding that many in the Denver area suffer from undiagnosed or underdiagnosed behavioral health conditions leading to an overwhelmed acute care system that is taxed by individuals seeking emergency care during a mental health crisis or acute intoxication.

Another related concern is those suffering from co-occurring behavioral and physical conditions. Behavioral illness tends to complicate physical health and vice versa. Additionally, many mental health conditions include symptoms such as lack of motivation and apathy, or severely impact functioning such that it is difficult for a patient to attend healthcare appointments or meet their basic needs. Only about 11% of care-seeking adults in the Denver area have been diagnosed with...
depression, and only 0.7% have been diagnosed with Opioid Use Disorder, both of which are significant drivers in emergency department visits. Additionally, about 30% of high school students report symptoms of depression, and 16% have seriously considered suicide at some point in the last year.

The needs of mothers were especially concerning to our community. In the Denver area, about 30% of maternal mortality deaths are due to self-harm, including drug overdoses and suicide. Furthermore, about 1 in 10 women report perinatal depression symptoms after their new baby is born, and 68.9% experienced some significant life stressors in the 12 months prior to delivery. A lack of adequate prenatal care and prenatal depression could be driving these numbers.

Alcohol-related causes are one of the most common APR DRGs for patients presenting to hospitals in the Denver metro area where roughly one-fifth of adults binge drink and 16.9% of high schoolers report having had five or more drinks within a few hours.

Compounding the concerns of behavioral illnesses are several social needs that hinder access to services or exacerbate poor mental health and the severity of substance use disorders. The Denver area has very high disparities in income with extremely high housing costs. About 25% of area residents use more than half of their income to pay for rent and about one-third live below 200% of the federal poverty level. A lack of stable, affordable housing could increase the amount of stress on an already unwell individual who might be forced to choose between finding housing and addressing their behavioral health needs. Homelessness is a significant challenge reported in our communities, which can exacerbate medical conditions by exposure to elements and lack of dependable nutrition. Transportation is another social need that could make it challenging to get to appointments, especially if public transportation does not go to convenient locations. Lastly, those with behavioral health needs may have a more difficult time finding and keeping employment, which could lead to a lack of stable income.

The capacity for caring for behavioral health patients, both proactively and through treatment, is knowingly lacking in the Denver area. When access is expanded, the care delivery model is quickly taxed again, and capacity is maxed out. The Denver area has about 432 behavioral health specialists per 100,000 residents and only 12.8 certified addictions counselors per 100,000 residents, and even fewer accept Medicaid. Psychiatric inpatient beds are restricted and there are not enough providers certified to offer Medication Assisted Treatment (MAT) for opioid use disorder. Additionally, service providers can be challenging to get to because of transportation problems or other social needs that hinder a patient’s access. Further compounding the problem is the lack of availability of culturally appropriate service providers who speak the language of the patient or understand the patient’s background and cultural norms influencing their decisions. Transitioning out of psychiatric inpatient care is an especially vulnerable time and there are not enough liaisons to support individuals upon discharge.

Our CHNE reported the scarcity of resource for behavioral health and the lack of effective treatment programs out of the Emergency Department. This intervention will bolster the interventions available to our community in our Emergency Department. It will also be designed to give appropriate guidance for follow up.

- How the population of focus aligns with identified community needs.
The population of focus for this intervention will be all adult patients with Medicaid who have been diagnosed with a primary or secondary behavioral health condition, including both mental illness and substance use disorders. This intervention is in alignment with our community’s priority concern of behavioral health. Our community repeatedly told us that behavioral health needs are the most pressing health concern facing our patients, especially for Medicaid patients who have fewer resources to access. We hope to address behavioral health needs by giving greater freedom to our medical staff to address their patients’ concerns through the implementation of Collaborative Practice Guidelines, created with input from the RAEs, and a referral to the RAE for continued follow-up care in the community. The additional follow-up by the RAE will allow patients to access the care they need to avoid future crises and minimize the usage of the acute care medical setting for behavioral health needs.

- How the proposed intervention will leverage available medical and / or social resources and partners.

Our proposed intervention will leverage and strengthen a crucial community resource: our relationship with the RAE. Our hospital sees patients from all over the state of Colorado, many of whom do not belong to the RAE with jurisdiction in our geographic region. Therefore, we will explore options for our electronic health record system to refer patient information to the RAE the member belongs to, regardless of whether that is outside our geographic region. This will ensure that the patient will have follow-up that is appropriate to their living situation and community. The RAE is the expert on Medicaid resources and connects patients to additional support that will aid in their overall wellbeing. The RAE has knowledge and access to far more community resources than our hospital-based case management and behavioral health teams.

The medical team in the Emergency Department is skilled and talented at treating patients with health emergencies. A common health emergency is within behavioral health. This program will augment the effectiveness and response to behavioral health emergencies to better serve our community.

5. Please identify the evidence base (academic, professional or otherwise) related to this intervention’s use among the target population by selecting one of the following options:

   (1) Randomized Control Trial (RCT) level evidence
   (2) Best practice supported by less than RCT evidence
   (3) Emerging practice
   (4) No evidence

If you selected option 1, 2 or 3 above, please use the space below to summarize the evidence base (academic, professional or otherwise) related to this intervention’s use among the target population. The response should address the intervention’s ability to impact the selected local and statewide quality measures identified in Question 6 in the Hospital Application. Please submit the response in narrative form and provide links to any reference documentation (data, citations, etc.).

If you selected option 4 indicating that there is no known evidence base, please explain why this intervention is being proposed regardless.

Response (Please seek to limit the response to 1,500 words or less)

(3) Emerging practice
In their guide on behavioral health care approaches, the Advisory Board (2011a) outlines the concerns with unmet behavioral health needs: people with behavioral illness have unnecessary ED visits, longer lengths of stay, and are more likely to be noncompliant with treatment recommendations. Advisory Board concludes that it is not enough to identify behavioral health concerns, but they must be treated as well. They reference their findings that one study found improved medication compliance among patients who had schizophrenia and were Medicaid beneficiaries could save $106 million in inpatient acute care costs. A recent study estimates that the cost of care for people with behavioral illness can be 60-75% greater than the population at large (Advisory Board, 2013). For patients who do find themselves in the ED, Advisory Board recommends taking a proactive approach that takes advantage of the opportunities presented to provide high-quality transitions of care by fostering strong partnerships with community providers to offer a continuum of community care when the patient is discharged.

In order to transition patients to community-based services, it is essential to understand why they are utilizing the ED in the first place (Advisory Board, 2019b). For many, a shortage of behavioral health professionals leaves them without any options for treatment outside of acute care. Some patients are reticent to seek help because of lingering stigma or uncertainty of costs. Still, others are unsure of their insurance coverage for such services. However, increasing access to appropriate, timely outpatient behavioral health treatment options is critical in cutting back on unnecessary behavioral health-related acute care visits.

Advisory Board (2015) has noted that more and more patients are beginning to access behavioral health treatment in the outpatient setting and has identified three trends contributing to this pattern. First, demographics are changing. The age group most likely to use behavioral services, those ages 25-44 years, is growing. Second, reimbursement for outpatient treatment has been more available due to increased coverage of behavioral health services through legislative mandates. Lastly, creative practices such as early screening and detection in primary care offices mean people can appropriately and effectively be treated in the outpatient setting, which is becoming the preferred treatment modality supported by reimbursement models.

For patients who do find themselves in the ED, there are several strategies one can use to decrease length of stay including ED-based telehealth for psychiatric patients, making use of crisis stabilization units to divert patients from the ED, and accessing a behavioral health discharge clinic to transition to a more appropriate setting which lowers the risk of ED visits (Advisory Board, 2019a). For example, Atrium Health used telehealth and decreased the length of stay for their behavioral health population by 2.5 hours during a time when ED volume increased by 37%. Intermountain diverted patients to a crisis stabilization unit, which costs about one-third of what an ED visit would cost and decreased behavioral health ED visits by 50% in one year. Finally, Massachusetts General started a Bridge Clinic for patients leaving the ED to offer same day medication assisted treatment (MAT), and only about 10% were readmitted within 30 days.

Several programs for reducing behavioral health readmissions and hospital stays have been identified in the literature. The Program of Assertive Community Treatment (PACT) was developed in Wisconsin in the 1960s and 1970s (Advisory Board, 2011b). This program employed a team of psychiatrists, nurses, pharmacists, social workers, and occupational therapists to provide community-based treatment for those with severe mental illness. They found that patients in the program saw improvement in health and health spending, personal relationships, legal trouble, and substance abuse. They also saw a decrease in the average number of hospital days per year for the participants. This program can be adjusted to meet modern concerns; for example, in Oklahoma, the
PACT team members for a participant are immediately notified when the participant is admitted to the ED or has law enforcement contact.

Massachusetts General developed a three-step approach to reducing readmissions among people with substance use disorders (Wirth and Ogundimu, 2019). They first utilized a multi-disciplinary addiction consult team to address substance use during inpatient admissions, which they estimate cut odds of readmission by 25%. Next, they opened an ED-based walk-in center for substance use disorder care, where only 10% of those patients are readmitted within 30 days. Finally, they developed strong relationships with their community mental health centers and the peer recovery coaches specifically, and incorporated care into primary care clinics, which reduced inpatient days by 9% and ED visits by 15%. Wirth and Ogundimu report that Massachusetts General had three pillars to their approach: engaged leaders who educated other staff on substance use disorders and evidence-based treatment, same-day access to MAT, and education for all staff to reduce bias.

Another study of San Francisco General Hospital implemented a discharge protocol for patients with dependence on alcohol, which included assessment and medication assisted treatment (MAT) when appropriate (Wei, Defries, and Lozada et al., 2015). They discovered that the use of such protocol increased MAT from 0% to 64% and reduced readmissions from 23.4% to 8.2%. Additionally, all-cause visits to the ED within 30 days of discharge decreased from 18.8% to 6.1%.

Viggiano, Pincus, and Crystal (2012) conducted a literature review of care transitions interventions for patients discharging from psychiatric inpatient stays and proposed nine critical components of care transition programs. They include prospective modeling or identifying those at greatest risk, authentically engaging the patient and family in the treatment plan, quality transition planning for the next level of care, identifying care pathways, ensuring information is accessible to all team members including those who will be treating the patient after discharge, utilization of transition coaches or agents, engaging providers with clear responsibilities and formal communication procedures, utilizing quality metrics and feedback on post-discharge outcomes to drive improvement, and shared accountability in both benefits and risks.

Standardized practice guidelines were studied by Medves et al. (2010), who conducted a literature review of the distribution and implementation of such practice guidelines in team-based healthcare settings. Of the 88 studies included in their review, 72.7% showed that the dissemination and adaptation of such standardized guidelines had statistically significant improvements in provider knowledge, practice outcomes, and cost savings. One such well-known example of standardized practice guidelines influencing behavioral health outcomes is the Zero Suicide protocol originally adopted by the Henry Ford Health System in Michigan (Coffey and Coffey, 2016). Zero Suicide is a program meant to change the culture of health care systems as well as adopt standardized practices to prevent suicide among the patients treated. The Henry Ford Health System saw suicides among their population drop by 80% and sustained this success for a decade, even though suicides increased during that time period in the general population of Michigan.

Castle Rock Adventist Hospital plans to mimic the successes outlined in the literature by incorporating elements of the effective programs in our collaborative practice guidelines. For instance, while Viggiano, Pincus, and Crystal (2012) discuss elements of successful discharges from psychiatric inpatient hospitals, many of the components that they found could be applicable to acute care hospitals treating patients with behavioral health needs. Additionally, the success of San Francisco General Hospital’s standardized discharge protocol encourages the use of standardized guidelines in the approach to patients with behavioral health needs. The work of Medves et al.
(2010) and Coffey and Coffey (2016) prove that standardized practice guidelines are an effective way to impact the care of patients with behavioral health needs.

SOURCES:


6.

a. Does the focus of the proposed intervention intersect with ongoing initiatives statewide (including, but not limited to those included in the ACC, State Innovation Model and Comprehensive Primary Care Plus)?

☑ Yes  
☐ No

b. If yes, please identify the applicable statewide initiative(s): (you may select more than one response from the list below)

- Behavioral Health Task Force  
- Affordability Road Map  
- IT Road Map  
- HQIP  
- ACC  
- SIM Continuation  
- Rx Tool  
- Rural Support Fund  
- SUD Waiver  
- Health Care Workforce  
- Jail Diversion  
- Crisis Intervention  
- Primary Care Payment Reform  
- Other: ___ (please identify)

Please also use the space below to briefly explain how the hospital will ensure the intervention aligns with the applicable ongoing initiative(s).

Response (Please seek to limit the response to 750 words or less)

Behavioral Health Task Force, IT Road Map, ACC, Crisis Intervention

This collaborative care process for behavioral health intervention aligns with the intentions of the state’s Behavioral Health Task Force, the IT Road Map, the Accountable Care Collaborative model, and the statewide crisis intervention efforts.

By collaboratively working with the RAE to create standardized discharge plans for patients with primary or secondary behavioral health diagnoses, we plan to align with the Behavioral Health Task Force’s safety net subcommittee intent of ensuring access to behavioral health care for all Coloradans regardless of situation. Our goal is to make sure that all of our identified patients have a plan or resources available to support whole person health, whether that be physical or behavioral.

The Colorado Healthcare Affordability and Sustainability Enterprise (CHASE) is a government-owned business within the Department of Health Care Policy and Financing. www.colorado.gov/hcpf
We intend to align with the IT Road Map by seeking an IT solution to refer all positively screened patients to the RAE. Such automated screening will not only increase efficiency in the health care system, but also provide opportunities for improved care coordination. The RAE will be notified of every one of their members who screens positive for social needs and be able to respond as appropriate. Such collaboration with the RAE will allow for high-performing, cost-effective solutions to complex, high needs situations while also serving to improve both member and provider experience.

Finally, we will explore options to encourage patient use of statewide crisis intervention resources through education on walk-in centers, crisis lines, and other options.

7. Please use the space below to explain any experience the hospital or any affiliated community partners have had with this type of intervention or target population and how that experience will support the success of the intervention.

Response (Please seek to limit the response to 500 words or less)

As a healthcare system, Centura does have experience with Collaborative Practice Guidelines. The guidelines listed above have been in use at Castle Rock Adventist Hospital, and several do apply to behavioral health. The guidelines have empowered staff to initiate appropriate rapid testing and treatment when the physician is otherwise engaged with another patient. These guidelines assure prompt and effective treatment of common conditions.

There are other system-wide behavioral health approaches already in use throughout our connected ecosystem: suicide screening and Zero Suicide. For suicide screening, all Centura hospitals use the Columbia Suicide Severity Rating Scale. All at-risk patients are screened using this evidence-based tool and standardized interventions are taken based on the patient’s assigned risk level. Additionally, our Centura Health Physician Group PCP offices screen for depression using the PHQ, another evidence-based behavioral health screening tool well-suited for the medical field. Zero Suicide is a suicide prevention approach from the Henry Ford Health System in Michigan, where efforts were taken to eliminate suicide in their patient population. This is an approach that starts with the assumption that suicide is preventable, not inevitable, and encourages cultural change in healthcare toward responsibility for the prevention of suicide.

Centura has an active Zero Suicide workgroup. SAMHSA provides grant funding to states to help implement this program via mental health centers, community programs, and hospital organizations. Centura was awarded grant funding for a period of two years to help implement this programming in the Denver Metro area, and Pueblo County. There is a small collaborative composed of clinicians from outpatient, primary care, leadership, and crisis services, that meets on a bi-weekly basis to discuss implementation efforts. The collaborative is led by a coordinator, who is responsible for submitting monthly and annual progress reports to the state’s Office of Suicide Prevention, and for managing the grant. The initiative has helped promote workforce training for suicide prevention, including implementing training on lethal means, collaborative safety planning, and the use of evidence-based suicide screening and assessment tools such as the Columbia Suicide Severity Rating Scale. Additionally, Centura’s program collaborates with other Zero Suicide programs throughout the state and country in order to help implement an effective care pathway.

There are several benefits to using this Collaborative Practice Guidelines intervention. First, nursing and other staff are familiar with this approach meaning training would be simpler than educating them on an entirely new system. Second, it is minimally disruptive to everyday practice in the
clinical setting, the guidelines simply give caregivers more freedom to practice in an efficient manner. Finally, this is one simple way to influence workplace culture and improve patient care.

8.  
a. Is this an existing intervention in use within the hospital ("existing interventions" are those interventions the hospital has implemented or is implementing on the day it submits the Hospital Application)?
   - Yes
   - No

b. If yes, please use the space below to explain how the following criteria for leveraging existing interventions is satisfied (the response may reference answers above):
   - The hospital must demonstrate that the use of the existing intervention is the best approach for meeting the needs of the community identified during the Community and Health Neighborhood Engagement process.
   - The hospital must demonstrate that the project will be enhanced to meet HTP goals.

Response (Please respond as applicable; Please seek to limit the response to 1,000 words or less)
Castle Rock Adventist Hospital already has Collaborative Practice Guidelines outlining standards of practice for patients presenting with complaints of alcohol intoxication, suspected drug intoxication, and suicidal ideation. This intervention will be enhanced for the purposes of HTP by adapting a Centura-wide guideline that will expand the scope of practice to more broadly address mental health issues. This will allow our caregivers more freedom and flexibility to address the needs of our patients in an efficient manner, as outlined above. Our community was clear with us that their most significant priority was addressing behavioral health, encompassing both mental health and substance use disorders.

This intervention will be enhanced for the purposes of the Hospital Transformation Program and achieving our quality measure goals. The specific milestones will be finalized and outlined in greater detail in our implementation plan, but several opportunities have been identified already. For example, we will explore options in our electronic health record to conveniently and accurately identify the correct RAE and send referrals for patients with primary or secondary behavioral health-related diagnoses to that RAE. Standardized education will be created and cascaded across our connected ecosystem to support competency development and proper use of the new guidelines. Lastly, system-wide data tracking through standardized dashboards and progress reports will be created to monitor our progress and identify in real-time where improvements need to occur.

9.  
a. Will the intervention be a joint effort with another organization (e.g., a Regional Accountable Entity, Local Public Health Agency, a mental or community health center, another community organization or any other external organization)?
   - Yes
   - No

Partnerships are not required, but, if the hospital will partner, please complete the remainder of this question and provide the required documentation (see subpart c).
b. If yes, please complete the following chart, including listing the partner organization; listing the type of organization; indicating whether the hospital has previously partnered with the organization; and providing a high-level summary of the expected role of the organization in intervention’s leadership and implementation.

<table>
<thead>
<tr>
<th>Partner Organization Name</th>
<th>Type of Organization</th>
<th>Does the hospital have any previous experience partnering with this organization? (Yes or No)</th>
<th>Organization’s Role in Intervention Leadership and Implementation (high-level summary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado Access</td>
<td>Regional Accountable Entity (RAE)</td>
<td>Yes</td>
<td>Receive referral information and collaborate on a discharge planning process.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C. Please also submit documentation of the partnership with each listed organization. Documentation may be provided separately for each organization listed above and could include: a contract; a memorandum of understanding; a business association agreement; a Letter of Partnership from the listed organization(s); or similar documentation. If a Letter of Partnership is provided, in it the organization should: (1) acknowledge that it intends to partner; (2) provide a brief description of the organization; (3) express agreement with the planned intervention; and (4) express agreement with the planned role it will have in leadership and implementation of the intervention as expressed above. The letter should be signed by a member of the organization’s management and submitted with this application in the same .pdf document. The Letter of Partnership Template can be found on the [HTP webpage](https://www.colorado.gov/hcpf).
Hospital Transformation Program

Intervention Proposal

I. Background Information

This Intervention Proposal is designed to clearly articulate the scope and goals of proposed transformation interventions aimed at impacting the hospital’s selected local quality measures under the HTP. The following questions are meant to assist the state in identifying: the evidence base for each intervention; the need within targeted communities for the implementation of the interventions; and how the interventions will advance the goals of the HTP.

Hospitals will not be required to implement a specified number of interventions. Instead, participation requirements are based on the selection of local quality measures to impact within the five HTP Focus Areas:

- Reducing Avoidable Hospital Utilization
- Core Populations
- Behavioral Health and Substance Use Disorders
- Clinical and Operational Efficiencies
- Community Development Efforts to Address Population Health and Total Cost of Care

Hospitals will be required to address statewide measures for each Focus Area. Hospitals will also be required to select from the HTP list of local measures across the five Focus Areas based on community needs and the goals of the HTP. Each hospital will be required to work on a set of measures equal to 100 points. The number, mix and points per measure will vary according to hospital size, defined by bed count or specialty type:

- Large hospitals (91+ beds) will be accountable for six statewide measures, totaling 60 points and a minimum of four local measures, which will account for 40 points. Points per local measure will equal 40 divided by the number of local measures selected.
- Medium hospitals (26-90 beds) will be accountable for six statewide measures and a minimum of two local measures. If two local measures are selected, statewide measures will total 75 points, and local measures will account for 25 points. Points per local measure will equal 25 divided by the number of local measures selected. If three local measures are selected, then statewide measures will total 67 points and local measures will account for 33 points. Points per local measure will equal 33 divided by the number of local measures selected. If four or more local measures are selected, then statewide measures will then total 60 points and local measures will account for 40 points. Points per local measure will equal 40 divided by the number of local measures selected for four or more local measures.
- Small hospitals (<26 beds) excluding critical access hospitals will be accountable for six measures (statewide or local) to account for 100 points. Points per each measure will equal 100 divided by the number of measures selected.
- Critical access hospitals will be accountable for six measures (statewide or local) and will have their risk for measures reduced by 40%.
• Pediatric hospitals will be accountable for five statewide measures, totaling 50 points and a minimum of five local measures, which will account for 50 points. Points per local measure will equal 50 divided by the number of local measures selected.

• Respiratory specialty hospital(s) will be accountable for four statewide measures and a minimum of four local measures. If four measures are selected then statewide measures will total 56 points and local measures will account for 44 points. Points per local measure will equal 44 divided by the number of local measures selected. If five or more measures are selected, then statewide measures will total 50 points and local measures will total 50 points. Points per local measure will equal 50 divided by the number of local measures selected.

Hospitals have the option to work on local measures beyond the required minimum. This would spread the local measure risk by reducing the points per local measure.

In addition, hospitals have the option to replace a local measure with a statewide priority. Each statewide priority will be worth 20 points and if selected the points for each remaining local measure will be equal to the remaining total required local measure points divided by the number of local measures, greatly reducing the risk associated with those measures.

Hospitals should consult the Measure Scoring Summary, which can be found on the HTP webpage, for more information about measure selection, requirements and scoring.

Hospitals must then design five-year interventions that will impact their selected quality measures.

Hospitals must demonstrate that their proposed interventions will fulfill the goals of the HTP and are evidence-based. They must also justify the selection of each intervention based on the findings of the Community and Health Neighborhood Engagement process, including the environmental scan and feedback.

Each hospital will need to report its own data and submit its own application, but partnerships between hospitals may occur in some instances.

Hospitals may leverage existing resources for interventions, and existing interventions may be considered insofar as they expand or enhance the Department’s noted goals and meet the following criteria:

• The hospital must demonstrate that the existing intervention is being selected because it is the best approach for meeting the needs of the community identified during the Community and Health Neighborhood Engagement process.

• The hospital must demonstrate that the intervention can and will be enhanced to meet HTP goals.

In addition to meeting the above criteria, any hospital proposing existing interventions for participation in the HTP will be expected to propose and implement accelerated milestones in the Implementation Plan for such interventions.

This Intervention Proposal must be completed separately for each of the interventions being proposed for inclusion in the HTP. Hospitals must submit interventions that, together, address all of the statewide quality measures and the local quality measures listed in the hospital’s response to Question 6 in the Hospital Application.
II. Overview of Intervention

1. Name of Intervention: Colorado Hospital Association ALTO model

2. Please use the table below to identify which statewide and selected local quality measures (from the hospital’s response to Question 6 in the Hospital Application) the hospital will address through this intervention. As a reminder, each of the statewide and selected local quality measures must be identified for at least one intervention. As such, if this is the only intervention addressing a given Focus Area, all statewide quality measures and all selected local quality measures for that Focus Area must be included in this response. This response should align with the intervention-specific list included in the response to Question 7 in the Hospital Application.

Please note, hospitals are also required to complete the Intervention Proposal below for statewide priorities identified in Question 6 of the HTP Hospital Application.

Please use the unique identification code from the Performance Measures List (which is available on the HTP website) to identify your selected measures. For example, the measure “30 Day All Cause Risk Adjusted Hospital Readmission” should be listed as SW-RAH1.

Response (Please format the response as a numbered list)

1. SW-BH3
2. SW-BH1

3. Please use the space below to describe the intervention and the rationale for its selection. Responses should include:
   - A description of the intervention; and
   - How the intervention advances the goals of the HTP.

Response (Please seek to limit the response to 1,000 words or less)

- A description of the intervention.

ALTO is an existing intervention that our hospital system has been utilizing in our Emergency Departments since December 1, 2018 and will be enhanced for the purposes of HTP. The Colorado Hospital Association used the Colorado chapter of the American College of Emergency Physicians’ (ACEP) Opioid Prescribing & Treatment Guidelines to advise their efforts. The ultimate goal of the ALTO program is to reduce the number of opioid medications administered to patients in the Emergency Department and increase the number of alternatives to opioids administered. Opiates might still be used as a second line medication, but the use of ALTO medications might decrease the number of opioids used. This approach is thought to reduce the harm that could potentially be caused by introducing opioid naïve patients to highly addictive medicines by instead administering non-opioid medications, or by abstaining from administering additional opioids to individuals who might be at risk to misuse the medications.

The model includes three phases: pre-launch, training and development, and project launch. During the pre-launch phase, hospital executives are informed of the project and educated on the benefits of such a program, an opioid safety gap assessment is performed to gauge interest and concern for opioid safety in the hospital or healthcare system, associates are asked to sign on to an opioid safety commitment, and a checklist of tasks to be completed by various leadership roles in the organization.
The Colorado Healthcare Affordability and Sustainability Enterprise (CHASE) is a government-owned business within the Department of Health Care Policy and Financing.

www.colorado.gov/hcpf

is begun. The second phase, training and development, is when associates are encouraged to attend ALTO training, materials are distributed, and a data collection system is developed. In phase three, the ALTO program is officially launched, and providers are expected to decrease the number of opioids administered and increase the number of alternatives to opioids administered in accordance with recommendations as developed from the Colorado Hospital Association and Colorado ACEP. These recommendations were tailored to address the needs and patient populations of 21 system-wide sites for Centura Health.

Five pain pathways are targeted for intervention in the Emergency Department: headache/migraine, musculoskeletal pain, renal colic, chronic abdominal pain, and extremity fracture/joint dislocation. These five pathways represent the best fit for our ED when taken in the context of our practices and workups. Patients are often undifferentiated on presentation to the ED, so major chief complaints were chosen where we saw an opportunity for ALTO therapies to be used. For each pain pathway, non-opioid treatments are suggested with recommendations for immediate and alternative options and IV and non-IV options, depending on the presenting concern. These suggestions prompt the practitioner to utilize non-opioid pain treatments first and opioids as secondary or tertiary options should all other options fail to sufficiently treat the patient’s pain.

Castle Rock Adventist Hospital has the preferred prescribing guidelines built into our electronic health record order sets for each pain pathway for easy access and review by the provider. Furthermore, these principals are embedded in our overarching pain management policy and nursing guidelines for using lidocaine and ketamine. Castle Rock Adventist Hospital differs from the Colorado Hospital Association ALTO model in that we do not have nitrous oxide available for pain management.

We welcome questions on our approach to pain treatment and discuss the rationale behind treatment with every patient.

Currently, our progress is monitored by a Centura Health ALTOs Steering Committee which meets regularly; membership includes our ALTO Program Coordinator, physician leadership, pharmacy representation, quality team members, and data and IT technicians. Each month, our data is sent to the Colorado Hospital Association, which puts it through their own algorithm, with the help of a company called Alteryx, before sending the final product back to Centura. This information is reviewed by the steering committee and options for ongoing improvement are discussed.

Moving forward, several options have been discussed to enhance the intervention for the purposes of HTP. Options include creating an internal dashboard to monitor our progress independent of CHA, seeking out provider level drug administration data to provide opportunities for learning and recognition, and adding the CHA naloxone distribution guidelines to our nursing competencies. These options will be reviewed and offered in more detail in our implementation plan.

• How the intervention advances the goals of the HTP.

This intervention will help to advance the HTP goals.

1. Patient outcomes are expected to improve through our redesign of how we treat pain with a first-line treatment that does not include opioids. Using fewer opioids in the Emergency Department will result in fewer patients introduced to potentially addictive medications that could lead to addiction and complications later.
2. Utilization of the Colorado Hospital Association ALTO model will improve the performance of our delivery system by ensuring that the appropriate care is given in the appropriate setting. Administering non-opioid pain medications for the indicated pain pathways is the most appropriate care for patients in acute pain in the Emergency Department.

3. We hope to lower Health First Colorado costs through appropriate, medically necessary avoidance of potentially addictive opioids. Research has shown that the alternatives to opioids for the identified pain pathways are just as effective or even better at treating pain than opioids. Treating pain with the most appropriate medication and avoiding complications that could come with opioids will help to decrease healthcare costs.

4. This intervention will accelerate our hospital’s readiness for value-based payment by shifting our practice to a more evidence-based, effective manner of treatment for pain.

5. Finally, the intervention will increase collaboration with US Acute Care Solutions (USACS) our contracted ED providers. We will work with them on data sharing, particularly around physician administration information to monitor quality.

4. Please use the space below to describe how the intervention and any selected local quality measures to be addressed by the intervention align with community needs identified throughout the Community and Health Neighborhood Engagement process (including data identified in the hospital’s CHNE midpoint and final reports), including but not limited to:

   • How the intervention and any selected local quality measures to be addressed by the intervention were selected based on identified community needs, including how they align with identified significant behavioral and physical health needs and / or service capacity resources and gaps, including related to care transitions and social determinants of health;
   • How the population of focus aligns with identified community needs; and
   • How the proposed intervention will leverage available medical and / or social resources and partners.

Response (Please seek to limit the response to 1,500 words or less)

   • How the intervention and any selected local quality measures to be addressed by the intervention were selected based on identified community needs, including how they align with identified significant behavioral and physical health needs and / or service capacity resources and gaps, including related to care transitions and social determinants of health.

This intervention and the measures addressed by it align with the community needs that were identified during our Community and Health Neighborhood Engagement (CHNE) process. According to that feedback, their two top priorities are mental health and substance use. Specifically, our community expressed concerns for mothers with behavioral health needs who were seeking family-friendly sober living homes and the struggle of finding and keeping a job that many with substance use disorders face. Many individuals with substance use disorders may also suffer from co-occurring physical health needs, both complicating the severity of the other.

The presence of substance use disorders coincides with several social needs. Our community expressed a concern that individuals with substance use disorders may be at an increased risk of experiencing trauma or to have experienced previous trauma. Furthermore, 5.4% of individuals in the metro-Denver area report that they are unable to find transportation to appointments. The presence
of trauma, lack of access to transportation, and substance use disorders combine to make healthy living very difficult for individuals.

Accessibility of existing resources in the Denver metropolitan area is also a significant barrier to care. The Denver area has plenty of resources, but they may not always be easy to get to either because a person does not have a car, or the location is not near public transportation stops. Access to care is more difficult for non-English speakers who need to find a provider who speaks their native language. Behavioral health and primary care physicians can be especially difficult to find, with 432 behavioral health specialists per 100,000 residents (rates differ depending on the type of specialty) and 83.3 primary care providers per 100,000 residents in the Denver metro area. This lack of easy access to providers means that individuals might turn to the emergency department for pain or behavioral health complaints that could have been addressed at an outpatient office. The tendency for some patients to seek help from the ED leaves the ED with the responsibility of sensibly treating complex patients with pain complaints while also taking into consideration social and behavioral needs and the lack of easily accessible resources in the community, for which the ED is not well equipped. Our CHNE found that opioid disorder was present in our community at 0.3%. However, as the problem and our community grow, this will only become a larger problem.

By improving upon our Colorado Hospital Association ALTO intervention, we hope to better serve individuals who turn to the ED for pain management and potential opioid use disorders. The goal of our intervention is to reduce harm by limiting the introduction of potentially addictive medicines for patients with pain complaints by instead using non-opioid alternatives. Hopefully, this will limit the rates of opioid addiction and reduce the burden on an already stressed behavioral health and PCP system.

• How the population of focus aligns with identified community needs.

Our population of focus for this intervention includes all ED patients presenting with a pain complaint. This aligns explicitly with our community’s identified needs. During our CHNE process, we frequently heard that patients turn to the ED for care because of difficulty accessing outpatient services. Our community is also concerned about the high rates of opioid misuse and abuse in the state. This intervention aims to serve those patients who are so clearly coming into our ED by avoiding treating their pain with potentially addictive opioid medications.

• How the proposed intervention will leverage available medical and / or social resources and partners.

Castle Rock Adventist Hospital hopes to leverage available medical and social resources available to us for the purposes of this intervention. All Centura ED clinicians are contracted through US Acute Care Solutions (USACS) and are directly responsible for the pain medications administered in our ED. We will continue to work with USACS on minimizing opioid administrations and increasing ALTO administrations. Dr. Chris Johnston, a USACS physician and the ED medical director for Centura Health’s St. Anthony North Health Campus, authored sections of the ACEP guidelines and provides guidance and oversight for all Centura hospitals’ ALTO endeavors. We also plan to continue utilizing the resources of the Colorado Hospital Association (CHA), which has provided support throughout our implementation and ongoing data breakdown. We will continue to work with CHA as we improve our intervention and incorporate their statewide strategy for ALTOs into our approach. Additionally, Centura Health works closely with the Colorado Consortium for Prescription Drug Abuse Prevention and plan to continue this collaboration throughout the implementation of this intervention.
This project is supported by our facility Medication Safety Committee and has also spread to areas outside of the Emergency Department, such as Women’s Services. Our Quality and Patient Safety Committee provides oversight to the program.

5. Please identify the evidence base (academic, professional or otherwise) related to this intervention’s use among the target population by selecting one of the following options:

(1) Randomized Control Trial (RCT) level evidence
(2) Best practice supported by less than RCT evidence
(3) Emerging practice
(4) No evidence

If you selected option 1, 2 or 3 above, please use the space below to summarize the evidence base (academic, professional or otherwise) related to this intervention’s use among the target population. The response should address the intervention’s ability to impact the selected local and statewide quality measures identified in Question 6 in the Hospital Application. Please submit the response in narrative form and provide links to any reference documentation (data, citations, etc.).

If you selected option 4 indicating that there is no known evidence base, please explain why this intervention is being proposed regardless.

Response (Please seek to limit the response to 1,500 words or less)

(1) Randomized Control Trial (RCT) level evidence

Since instituting the Centura ALTO model based on the CHA framework in December 2018, Castle Rock Adventist Hospital has successfully decreased our opioid administrations per 1,000 ED visits by 19% and increased our ALTO administrations per 1,000 ED visits by 5% as compared to a baseline period from March through November 2018. We look forward to enhancing the program through the implementation of continuous improvement milestones (which will be detailed in the implementation plan) to continually improve upon our current successes.

The Colorado Hospital Association piloted their approach in 2017 when they implemented the Colorado Chapter of the American College of Emergency Physicians (ACEP) guidelines for opioid prescribing in ten Emergency Departments across the state (Colorado Hospital Association, 2018). The rates of opioid administration, measured in morphine equivalent units (MEUs), and the rate of alternatives to opioids (ALTOs) administration were tracked for six-months and compared to the same six-month period from the year before. The administration of opioids and ALTOs was monitored as it related to five key pain pathways: headache/migraine, musculoskeletal pain, renal colic, chronic abdominal pain, and extremity fracture/joint dislocation. Providers were educated on non-opioid pain treatments recommended as first-line treatments for each pain indicator and encouraged to use opioids only as a last resort. The EDs included in the study represented a variety of urban and rural institutions and a variety of trauma designation levels; two of the facilities were freestanding EDs. Together, the pilot sites reduced their opioid usage in the EDs by 36% and increased the administration of every ALTO medication except ibuprofen (Colorado Hospital Association, 2018). Lidocaine administration increased the most at 451% with acetaminophen increasing the least at 27% for an overall increase in ALTO administration of 31.4%. ALTO administration increased for every pain pathway and for malignant neoplasms. Although opioids were still the primary treatment for pain associated with extremity fractures and dislocations and malignant neoplasms, the rate of administration of opioids decreased for each condition.

The Colorado Healthcare Affordability and Sustainability Enterprise (CHASE) is a government-owned business within the Department of Health Care Policy and Financing.

www.colorado.gov/hcpf
Colorado Hospital Association shared their lessons learned from this pilot study to aid any other hospitals who wished to repeat the model. These included the importance of hospital leadership signing a commitment letter, clear roles and responsibilities for the hospital players, dedicating resources to the accurate abstraction of data, plentiful education for nurses and providers, and abundant communication that involved plans for internal and external stakeholders (Colorado Hospital Association, 2018). The data from the CHA pilot was compelling and curriculum for training was built around the successful initiative. Centura modified the model and developed site training and competencies for staff within our systemwide program.

The pain pathway recommendations are based on research and the Colorado ACEP guidelines (2017). For example, haloperidol is listed as an alternative option for migraine and is an effective pain reliever when compared to a placebo (Honkanemi et al, 2006). Another literature review revealed that use of opioid medications for migraine pain actually lengthened the ED visit, was less effective in treating the pain, and could lead to repeat ED visits. Metoclopramide (an immediate/first-line therapy recommendation from CHA) and prochlorperazine (an alternative option recommended by CHA) were found to be the most effective (Dodson et al, 2018). Furthermore, the American Headache society performed their own literature review to determine their recommendations for treatment of migraine pain and concluded that opioids, while probably effective, are not recommended for regular use in treatment (Marmura et al., 2015). They recommend triptans and dihydroergotamine (nasal spray and inhaler) as level A treatments, and ergotamine and other forms of dihydroergotamine as level B treatments. Also included in level A are acetaminophen, NSAIDs, general opioids, sumatriptan/naproxen, and acetaminophen/aspirin/caffeine. Many other medicines were classified, and these recommendations were used to guide the first-line and alternative medication recommendations for headache/migraine pain by CHA and ACEP.

Ketamine is effective for chronic abdominal pain and musculoskeletal pain, including extremity fracture/joint dislocations (Colorado ACEP, 2017; Colorado Hospital Association, 2018). ED trials show that ketamine is effective for pain relief with mild side effects (Ahern et al., 2015) and is comparable or superior to opioids (Sin et al., 2015; Miller et al., 2015; Motov et al., 2015).

Lidocaine is recommended for use with renal colic, chronic abdominal pain, and extremity fracture/joint dislocation (Colorado ACEP, 2017; Colorado Hospital Association, 2018). A randomized control trial in one ED comparing the use of IV lidocaine and IV morphine for the treatment of renal colic found that the lidocaine significantly reduced pain (Sleimanpour, 2012). Another study looked at the lidocaine 5% patch and its usefulness in treating lower back pain and found that it improved pain on all four NPS composite measures (Galler et al, 2004).

Additional non-opioid treatment options are discussed by Colorado ACEP with the supporting literature and outlined in the Colorado Hospital Association’s guidelines. For example, trigger point injections are recommended for headache/migraine pain and musculoskeletal pain; NSAIDs for headache/migraine pain, musculoskeletal pain, and renal colic; haloperidol for headache for chronic abdominal pain (Colorado ACEP, 2017; Colorado Hospital Association, 2018).

SOURCES:


6. a. Does the focus of the proposed intervention intersect with ongoing initiatives statewide (including, but not limited to those included in the ACC, State Innovation Model and Comprehensive Primary Care Plus)?

☐ Yes
b. If yes, please identify the applicable statewide initiative(s): (you may select more than one response from the list below)

- Behavioral Health Task Force
- Affordability Road Map
- IT Road Map
- HQIP
- ACC
- SIM Continuation
- Rx Tool
- Rural Support Fund
- SUD Waiver
- Health Care Workforce
- Jail Diversion
- Crisis Intervention
- Primary Care Payment Reform
- Other: Colorado Hospital Association ALTO efforts. (please identify)

Please also use the space below to briefly explain how the hospital will ensure the intervention aligns with the applicable ongoing initiative(s).

Response (Please seek to limit the response to 750 words or less)
While our ALTO intervention does not explicitly address the listed statewide initiatives, it does align with other statewide efforts to reduce administration of opioids in healthcare. We currently work closely with Colorado Hospital Association (CHA) to carry out our ALTO program in our ED and Centura is currently piloting inpatient use of this model.

7. Please use the space below to explain any experience the hospital or any affiliated community partners have had with this type of intervention or target population and how that experience will support the success of the intervention.

Response (Please seek to limit the response to 500 words or less)
This will be an ongoing intervention for Castle Rock Adventist Hospital. We began using this model on December 1, 2018. We are the only hospital system in the state to execute on an initiative of this scale. By the time HTP will measure our performance for this measure, we will have several years of experience with it. This experience will guide our implementation and continuous improvement as we progress on this measure to ensure that we perform to the highest standards of expectations for the responsible treatment of pain.

Our community partners also have experience with this intervention and our target population. Colorado Hospital Association did a pilot study prior to our implementation of this intervention in our own hospital and saw considerable successes in decreasing the rates of opioid administration and increasing the rates of ALTO administration. This experience and their lessons learned during the pilot study helped guide all the Centura hospitals when they began their program in December 2018. Additionally, Dr. Chris Johnston, a USACS physician and ED medical director for Centura Health’s St. Anthony North Health Campus, authored sections of the ACEP guidelines that are the foundation for
this intervention. He sits on the Centura-wide ALTO steering committee, which reviews our hospital’s progress and offers recommendations for improvement.

8.

a. Is this an existing intervention in use within the hospital (“existing interventions” are those interventions the hospital has implemented or is implementing on the day it submits the Hospital Application)?

☐ Yes
☐ No

b. If yes, please use the space below to explain how the following criteria for leveraging existing interventions is satisfied (the response may reference answers above):

- The hospital must demonstrate that the use of the existing intervention is the best approach for meeting the needs of the community identified during the Community and Health Neighborhood Engagement process.
- The hospital must demonstrate that the project will be enhanced to meet HTP goals.

Response (Please respond as applicable; Please seek to limit the response to 1,000 words or less)

ALTO is an existing intervention that Castle Rock Adventist Hospital will continue to utilize and will enhance to meet the needs of the HTP. This model is a first of its kind organized effort to reduce opioid administrations and increase ALTO administrations for the responsible treatment of pain in EDs. It has been shown to be effective in Colorado during CHA’s pilot study and has continued to be effective in our facility by lowering opioid administrations 19% and increasing ALTO administrations 5% since we began this intervention in December 2018.

Furthermore, this meets the needs of our community, which is very concerned about the rates of opioid misuse and abuse, as well as the concerning levels of opioid overdose deaths in our state. This intervention aims to prevent opioid addiction and overdose death by avoiding using opioid medication to treat pain that can be effectively treated with other types of medications. By avoiding the use of opioids, we also aim to decrease the burden on substance use disorder treatment providers, which are already stretched thin and which our community reports are difficult for the target population to access.

We hope to enhance this intervention in several ways. As a hospital system, Centura plans to own our own ALTO data. Currently, CHA partners with Centura to process the data we provide them, put it through their algorithm, and then send it back to Centura. Centura plans to continue to partner with CHA but hopes to create our own ALTO dashboard and process metrics reports so that Castle Rock Adventist Hospital can continuously monitor our progress on a day-to-day basis as necessary. This could include provider-level information on administration rates. The provider-level data will be gathered by USACS as well and shared with their providers who staff our ED. Data transparency will allow USACS to either recognize those providers who are doing very well or offer additional supports to those providers who have the opportunity to improve. Lastly, we will consider adding CHA’s Narcan distribution guidelines to our ED nursing competencies. This will offer additional support in the EDs for providers. These plans are not yet finalized and may change between now and when our implementation plan is submitted. The implementation plan will give more details on our final plan for enhancing this intervention.
9. Will the intervention be a joint effort with another organization (e.g., a Regional Accountable Entity, Local Public Health Agency, a mental or community health center, another community organization or any other external organization)?

- Yes
- No

Partnerships are not required, but, if the hospital will partner, please complete the remainder of this question and provide the required documentation (see subpart c).

b. If yes, please complete the following chart, including listing the partner organization; listing the type of organization; indicating whether the hospital has previously partnered with the organization; and providing a high-level summary of the expected role of the organization in intervention’s leadership and implementation.

<table>
<thead>
<tr>
<th>Partner Organization Name</th>
<th>Type of Organization</th>
<th>Does the hospital have any previous experience partnering with this organization? (Yes or No)</th>
<th>Organization’s Role in Intervention Leadership and Implementation (high-level summary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Acute Care Solutions</td>
<td>Contract providers for Centura’s Emergency Departments</td>
<td>Yes</td>
<td>ED providers who are responsible for treating pain complaints.</td>
</tr>
<tr>
<td>Colorado Hospital Association</td>
<td>Hospital membership organization/Convener of ALTO program</td>
<td>Yes</td>
<td>Guidance, data assistance, ongoing support.</td>
</tr>
</tbody>
</table>


c. Please also submit documentation of the partnership with each listed organization. Documentation may be provided separately for each organization listed above and could include: a contract; a memorandum of understanding; a business association agreement; a Letter of Partnership from the listed organization(s); or similar documentation. If a Letter of Partnership is provided, in it the organization should: (1) acknowledge that it intends to partner; (2) provide a brief description of the organization; (3) express agreement with the planned intervention; and (4) express agreement with the planned role it will have in leadership and implementation of the intervention as expressed above. The letter should be signed by a member of the organization’s management and submitted with this application in the same .pdf document. The Letter of Partnership Template can be found on the HTP webpage.
Hospital Transformation Program

Intervention Proposal

I. Background Information

This Intervention Proposal is designed to clearly articulate the scope and goals of proposed transformation interventions aimed at impacting the hospital’s selected local quality measures under the HTP. The following questions are meant to assist the state in identifying: the evidence base for each intervention; the need within targeted communities for the implementation of the interventions; and how the interventions will advance the goals of the HTP.

Hospitals will not be required to implement a specified number of interventions. Instead, participation requirements are based on the selection of local quality measures to impact within the five HTP Focus Areas:

- Reducing Avoidable Hospital Utilization
- Core Populations
- Behavioral Health and Substance Use Disorders
- Clinical and Operational Efficiencies
- Community Development Efforts to Address Population Health and Total Cost of Care

Hospitals will be required to address statewide measures for each Focus Area. Hospitals will also be required to select from the HTP list of local measures across the five Focus Areas based on community needs and the goals of the HTP. Each hospital will be required to work on a set of measures equal to 100 points. The number, mix and points per measure will vary according to hospital size, defined by bed count or specialty type:

- Large hospitals (91+ beds) will be accountable for six statewide measures, totaling 60 points and a minimum of four local measures, which will account for 40 points. Points per local measure will equal 40 divided by the number of local measures selected.
- Medium hospitals (26-90 beds) will be accountable for six statewide measures and a minimum of two local measures. If two local measures are selected, statewide measures will total 75 points, and local measures will account for 25 points. Points per local measure will equal 25 divided by the number of local measures selected. If three local measures are selected, then statewide measures will total 67 points and local measures will account for 33 points. Points per local measure will equal 33 divided by the number of local measures selected. If four or more local measures are selected, then statewide measures will then total 60 points and local measures will account for 40 points. Points per local measure will equal 40 divided by the number of local measures selected for four or more local measures.
- Small hospitals (<26 beds) excluding critical access hospitals will be accountable for six measures (statewide or local) to account for 100 points. Points per each measure will equal 100 divided by the number of measures selected.
- Critical access hospitals will be accountable for six measures (statewide or local) and will have their risk for measures reduced by 40%.
Pediatric hospitals will be accountable for five statewide measures, totaling 50 points and a minimum of five local measures, which will account for 50 points. Points per local measure will equal 50 divided by the number of local measures selected.

Respiratory specialty hospital(s) will be accountable for four statewide measures and a minimum of four local measures. If four measures are selected then statewide measures will total 56 points and local measures will account for 44 points. Points per local measure will equal 44 divided by the number of local measures selected. If five or more measures are selected, then statewide measures will total 50 points and local measures will total 50 points. Points per local measure will equal 50 divided by the number of local measures selected.

Hospitals have the option to work on local measures beyond the required minimum. This would spread the local measure risk by reducing the points per local measure.

In addition, hospitals have the option to replace a local measure with a statewide priority. Each statewide priority will be worth 20 points and if selected the points for each remaining local measure will be equal to the remaining total required local measure points divided by the number of local measures, greatly reducing the risk associated with those measures.

Hospitals should consult the Measure Scoring Summary, which can be found on the HTP webpage, for more information about measure selection, requirements and scoring.

Hospitals must then design five-year interventions that will impact their selected quality measures.

Hospitals must demonstrate that their proposed interventions will fulfill the goals of the HTP and are evidence-based. They must also justify the selection of each intervention based on the findings of the Community and Health Neighborhood Engagement process, including the environmental scan and feedback.

Each hospital will need to report its own data and submit its own application, but partnerships between hospitals may occur in some instances.

Hospitals may leverage existing resources for interventions, and existing interventions may be considered insofar as they expand or enhance the Department’s noted goals and meet the following criteria:

- The hospital must demonstrate that the existing intervention is being selected because it is the best approach for meeting the needs of the community identified during the Community and Health Neighborhood Engagement process.
- The hospital must demonstrate that the intervention can and will be enhanced to meet HTP goals.

In addition to meeting the above criteria, any hospital proposing existing interventions for participation in the HTP will be expected to propose and implement accelerated milestones in the Implementation Plan for such interventions.

This Intervention Proposal must be completed separately for each of the interventions being proposed for inclusion in the HTP. Hospitals must submit interventions that, together, address all of the statewide quality measures and the local quality measures listed in the hospital’s response to Question 6 in the Hospital Application.
II. Overview of Intervention

1. Name of Intervention: Create a standard approach leveraging cost quality data (Crimson) for clinical teams and continuous improvement

2. Please use the table below to identify which statewide and selected local quality measures (from the hospital’s response to Question 6 in the Hospital Application) the hospital will address through this intervention. As a reminder, each of the statewide and selected local quality measures must be identified for at least one intervention. As such, if this is the only intervention addressing a given Focus Area, all statewide quality measures and all selected local quality measures for that Focus Area must be included in this response. This response should align with the intervention-specific list included in the response to Question 7 in the Hospital Application.

Please note, hospitals are also required to complete the Intervention Proposal below for statewide priorities identified in Question 6 of the HTP Hospital Application.

Please use the unique identification code from the Performance Measures List (which is available on the HTP website) to identify your selected measures. For example, the measure “30 Day All Cause Risk Adjusted Hospital Readmission” should be listed as SW-RAH1.

Response (Please format the response as a numbered list)

1. SW-COE1
2. SW-RAH1
3. SW-PH1
4. CP1

3. Please use the space below to describe the intervention and the rationale for its selection. Responses should include:
   - A description of the intervention; and
   - How the intervention advances the goals of the HTP.

Response (Please seek to limit the response to 1,000 words or less)

To improve quality and reduce our potentially avoidable complications, Centura plans to purchase Crimson Continuum of Care (CCC) and make the data available to our multidisciplinary clinical councils (currently called Clinical Value Transformation teams or CVTs), EVAL business intelligence department, Chief Medical Officers and other stakeholders. Crimson Continuum of Care is a data infrastructure that pairs data insights with proven performance strategies to impact cost reduction and quality improvement at hospitals. Centura purchased CCC to inform our decisions, prioritize quality improvement projects, and create data transparency to drive improvement. The Crimson Continuum of Care pairs costs with patient details at the encounter and provider levels. The new cost-quality data will allow Castle Rock Adventist Hospital to look at performance metrics over time, review risk drivers, identify avoidable care opportunities, and monitor improvement in real-time.

Additionally, CCC offers the ability to nationally benchmark performance, not just compare to our own Centura system performance, so we will be able to see average case costs nationwide, compare
the quality of care, and now have the advantage to see provider level detail to understand variation and our cost-quality outliers. Crimson is sourced by coded data that can benchmark hospitals within their Optum database. Hospital coded cost-quality data will be updated every two weeks for all patient-level detail regardless of payor source. Our measurement of success for SW-COE1 will continue to be our hospital index score, as determined by Prometheus. Still, Crimson will allow us to move upstream and see patient-detail and physician-specific information in a timely manner to monitor real-time performance improvement and variation reduction.

As part of Centura Health, many of Castle Rock Adventist Hospital’s practice guidelines are influenced by multidisciplinary teams/councils across our connected ecosystem. These multidisciplinary teams are comprised of physicians, coordinators, and other medical staff with expertise in their respective care fields from all Centura facilities. These teams review quality metrics, recommend changes to care guidelines based on new evidence, modify order sets, as necessary, set standards of care for all Centura hospitals as it relates to their field, and oversee applicable accreditation programs. Areas of focus currently include, but are not limited to anesthesia and surgery, emergency medicine, heart and vascular care, hospitalist medicine, infection prevention, intensive care, neurosciences, oncology, orthopedics, trauma, and women and children care.

For this intervention, the multidisciplinary teams/councils and entity quality departments will be asked to utilize CCC to identify critical opportunities for quality improvement and prioritize their work based on this data. The team/council members, Quality Directors, Chief Medical Officers, and other clinical decision support teams will use their knowledge of best practices to identify how best to leverage the knowledge provided by the data and work with Centura Epic IT and our multidisciplinary clinical teams as necessary to develop new tools to standardize care in an evidence-based manner that will benefit our caregivers, improve patient outcomes, and reduce potentially avoidable complications.

In addition to being able to see data to drive improvement, Centura Health and Castle Rock Adventist Hospital will implement a standard approach to performance improvement and change management. At Centura Health, a multidisciplinary team of experts will come together to develop a simplified Lean process improvement approach to strengthen how we identify problems, develop solutions, defer to expertise and test solutions for impact and lead the solution through change management. This standard approach will not only connect our clinical teams across our connected ecosystem to identify problems but create a standardized framework and suite of tools to design and test solutions, drive a culture of continuous learning and improvement, and lead solutions through change management for ultimate sustainment.

Several opportunities have been identified to implement this intervention and create a more reliable process. Within this intervention, Centura will;

- Finalize the system-wide purchase for CCC.
- Design training on CCC systemwide and determine end users.
- Customize CCC to meet top quality priorities and build focused dashboards.
- Determine best way to disseminate information to clinical teams.
These details will be described in more detail in our implementation plan, along with a schedule of completion for our milestones.

- How the intervention advances the goals of the HTP.

The use of this Crimson intervention will advance all five of the HTP goals.

1. First, it will improve patient outcomes through care redesign and integration of care across settings. By utilizing the Crimson cost-quality tool, we will have updated data to inform continuous quality monitoring across our connected ecosystem. The data will inform and prioritize projects for our quality departments, case management, multidisciplinary clinical teams, and our Application Steering Committees (ASC). These projects will engage care givers from across all hospital departments, including nursing, physicians, registration, sterilization, and others. Such hospital-wide, integrated care redesigns driven by data-informed decisions will improve patient outcomes and reduce potentially avoidable complications.

2. Second, we plan to improve the patient experience by ensuring appropriate care is provided in appropriate settings. There are a couple of long-term opportunities to be addressed by this intervention;
   a. First, better patient care will result from standardized, data-informed processes.
   b. Additionally, this could provide strategic opportunities to identify patient needs based on zip code, thereby alerting us to additional PCP or specialty care needs by neighborhoods. This will have the potential to increase patient access to care.

3. Third, we hope to lower Health First Colorado costs through reductions in avoidable hospital utilization and increased effectiveness and efficiency in care delivery. As stated above, the Crimson cost-quality data will allow us to prioritize our most pressing needs that will have a significant impact on patient outcomes. We will also be able to use CCC to show us where we can be more efficient by identifying missed opportunities for avoidable complications.

4. Additionally, it will help ready Castle Rock Adventist Hospital for a value-based payment model. Through the use of the Crimson data, we will be able to identify quality improvement projects that will be most impactful in improving outcomes and allow us to continually monitor our performance to ensure we maintain a high level of quality or course-correct quickly if necessary.

5. Lastly, this intervention will help to increase collaboration with our community partners. Our partners will not be included in the intervention specifically. Still, the data gathered through the process and the quality improvement projects will help to guide our discussions with the RAEPs as we work to improve Medicaid patient outcomes.

4. Please use the space below to describe how the intervention and any selected local quality measures to be addressed by the intervention align with community needs identified throughout the Community and Health Neighborhood Engagement process (including data identified in the hospital's CHNE midpoint and final reports), including but not limited to:
   - How the intervention and any selected local quality measures to be addressed by the intervention were selected based on identified community needs, including how they align
The Colorado Healthcare Affordability and Sustainability Enterprise (CHASE) is a government-owned business within the Department of Health Care Policy and Financing.

www.colorado.gov/hcpf

with identified significant behavioral and physical health needs and / or service capacity resources and gaps, including related to care transitions and social determinants of health;

• How the population of focus aligns with identified community needs; and
• How the proposed intervention will leverage available medical and / or social resources and partners.

Response (Please seek to limit the response to 1,500 words or less)

• How the intervention and any selected local quality measures to be addressed by the intervention were selected based on identified community needs, including how they align with identified significant behavioral and physical health needs and / or service capacity resources and gaps, including related to care transitions and social determinants of health.

This Crimson intervention and the quality measure library available through the software, align with the community needs that were identified during our Community and Health Neighborhood Engagement (CHNE) process. Although the scope of this project is broad and our community had specific needs in mind, this intervention will address overarching needs for quality care, reducing unnecessary utilization, reducing length of stay, and decreasing rates of readmission through improved care in the hospital setting.

The stakeholders engaged in our CHNE process were highly concerned about behavioral health and social needs, with a particular concern for co-occurring behavioral and physical health conditions. Many mentioned the frequency of alcohol use, which is a very common APR-DRG in our hospital and often occurs in conjunction with complicating physical health needs. Our community also mentioned a desire to address chronic conditions such as overweight/obesity and hypertension, which seem to be on the rise in Colorado.

Social needs were mentioned in many ways during our CHNE process. Housing was a significant concern for the community; the steep cost of housing can lead to instability in family life, making other necessities difficult to provide. An increase in rent could result in a family needing to relocate after years of establishing social connections and community in a neighborhood. Homelessness is also a big concern for our community. For those experiencing mental illness or substance use disorders, employment can be challenging to find and maintain, leading to financial difficulties and an undue burden of stress. Some in the area may also experience limited healthy food options, either because they do not live near grocery stores or because the cost is prohibitive. Those who are elderly face unique social needs in that transportation can be a barrier for them getting to appointments and palliative care can be difficult to finance.

Capacity was another gap identified by our community. There are not always enough PCPs or specialty care providers to address the needs of the population. Access is even more restricted for patients with Medicaid, which not all providers accept. Adding to the difficulty is finding appointments during evening and weekend hours for working patients or providers who speak the same language as the patient. Care coordination and transitions are also lacking in our community and can be particularly problematic to find for patients who have been diagnosed with more than one chronic condition. Additionally, home care, skilled nursing, and long-term acute care services are limited for patients with Medicaid and are not always of the best quality.

Our proposed intervention of pairing Crimson data with our existing multidisciplinary clinical teams and quality departments to identify quality improvement projects could have the potential to lower readmission rates, decrease length of stay, and improve patient care and outcomes. While our focus
with this intervention is broad, it will emphasize the needs of our Medicaid population, which generally includes individuals who are more vulnerable to poorer outcomes and may have additional needs, thereby addressing our community’s concerns. Furthermore, this intervention has long term strategic potential for Centura by providing zip code level data, alerting us to communities that could benefit from a PCP office or specialty care clinic. Adding such additional resources to a community could help improve access to care and alleviate some of the transportation needs for patients who would otherwise have to travel long distances.

This intervention will assist Castle Rock Adventist Hospital’s ability to better identify and address the social reasons for readmission and recidivism in our local community. For example, we can identify those without a PCP prior to discharge and locate resources that meet the need in a location that is convenient prior to the patient’s discharge. We will also be able to better track underserved populations in our community and innovate to establish or pair resources with those populations.

- How the population of focus aligns with identified community needs.

Our population of focus for this intervention will be all Centura patients, with an emphasis on improving Medicaid patient outcomes. Crimson software will track all patients regardless of insurance, but we will have the ability to narrow information based on insurance status. While this is a comprehensive focus, it does align with what our community has identified as their most pressing needs. By emphasizing Medicaid patient outcomes, we will be looking at patients that are more vulnerable in general to poor outcomes and readmissions. We will also be turning a critical eye on potentially avoidable care with the hope of reducing costs and improving quality. This Crimson intervention has new long-term strategic implications for Castle Rock Adventist Hospital, which could benefit the patients and communities we serve. For example, by pulling patient information based on zip code, we could determine which neighborhoods would potentially benefit from a primary care office or specialty care in their area. Additional outpatient offices could help improve access for vulnerable patients to improve outcomes and avoid acute care utilization. Once specific priorities are identified through CCC our multidisciplinary clinical teams and quality departments will leverage a standardized process improvement and change management framework to drive improvement.

- How the proposed intervention will leverage available medical and or social resources and partners.

Although we will not be working explicitly with community partners on this intervention, the analysis provided by Crimson and the resulting quality improvement projects, identified and implemented through our standardized framework, will provide the fuel needed to have meaningful conversations with the RAEs and identify more opportunities for collaboration on vulnerable populations. We will, however, leverage available medical resources by encouraging collaboration across hospital settings. Quality improvement projects often require the involvement of multiple disciplines and hospital departments. We hope to improve outcomes by engaging caregivers across the spectrum of hospital roles in a manner that inspires data-driven improvement. We will also be utilizing our existing multidisciplinary clinical teams, ASCs, and quality departments, which will be responsible for using the data to inform their decisions.

5. Please identify the evidence base (academic, professional or otherwise) related to this intervention’s use among the target population by selecting one of the following options:

   (1) Randomized Control Trial (RCT) level evidence
(2) Best practice supported by less than RCT evidence
(3) Emerging practice
(4) No evidence

If you selected option 1, 2 or 3 above, please use the space below to summarize the evidence base (academic, professional or otherwise) related to this intervention’s use among the target population. The response should address the intervention’s ability to impact the selected local and statewide quality measures identified in Question 6 in the Hospital Application. Please submit the response in narrative form and provide links to any reference documentation (data, citations, etc.).

If you selected option 4 indicating that there is no known evidence base, please explain why this intervention is being proposed regardless.

Response (Please seek to limit the response to 1,500 words or less)
(3) Emerging practice

According to the Advisory Board (2012), missed prevention opportunities in the United States add up to about $55 billion in costs to the healthcare industry. Even more significant opportunities for reducing avoidable costs can be found by eliminating unnecessary care, administrative inefficiencies, poor service delivery, inflated prices, and fraud and abuse. In their work with Crimson Population Risk Management, the Advisory Board has identified inpatient medical admissions, outpatient surgery, and prescription drugs as the most significant opportunities for reducing avoidable costs. To tackle avoidable costs, hospitals must look closely at the control they have over the problem, the return on investment, and the size of the opportunity.

Avoidable Care

Avoidable care utilization is one area of potential cost reduction for the healthcare industry. The Advisory Board (2015a) looked at a few examples of pain management programs that worked to reduce avoidable utilization. Pain management is critical to consider as sufferers of chronic pain tend to utilize care inappropriately. In their case studies, the Advisory Board found two elements to be successful in programs to address pain: support for providers and patient-centered pain management. For example, HealthPartners and Regions Hospital partnered to work with high-utilizer patients who were suspected of drug-seeking behaviors by creating a Hospital Care Plan and ED Care Plan Committees. They were able to reduce inpatient admissions by an alarming 67%, reduce ED visits by 46%, and realize $1.1 million in cost savings over the course of three years. They achieved these outcomes by requiring providers to use a manual process to order narcotics, disallowed the refilling of lost narcotics prescriptions, and creating automated case reviews in their electronic health record with pop-up alerts for patients with active care plans. In another example, the University of Washington Medical Center in Seattle sought to increase access to pain specialists for primary care providers who were working with pain patients and reduce the number of opioids used to treat pain. They utilized telehealth and multidisciplinary consults to assist primary care providers. They reported improved pain care, reduced dependence on opioids, and $10,000 in Medicaid savings for every $1,000 spent on Medicaid patients. Lastly, Legacy Health in Portland changed their approach to pain management in chronic pain patients with psychosocial needs. They partnered with their primary care providers and provided education on the causes of pain and offered alternative treatments such as acupuncture. Through this intervention, Legacy Health saw an 80-90% reduction in ED visits for the population studied.
Another opportunity for reducing avoidable care utilization is in the area of elective surgeries. Advisory Board (2015b) recommends that elective surgeries be avoided by establishing robust criteria for surgeries, standardized protocols for assessing appropriateness, and having a case review prior to the surgery. They looked at a couple of successful programs, including Virginia Mason Medical Center and Legacy Health, who reduced elective orthopedic surgeries. Virginia Mason standardized their process for joint replacement surgery by entering into an agreement with payors for a guarantee against avoidable readmissions, meaning that the hospital forfeited any reimbursement for avoidable readmissions post-surgery. Legacy Health standardized their spine surgery protocol by requiring patients to see both a physical therapist and a psychologist before they could be eligible for surgery and saw that 20% of potential surgical candidates opted out of surgery due to successful experiences with physical therapy.

Another important area to consider in terms of avoidable utilization is unmet behavioral health needs. Advisory Board (2015c) estimates the cost of untreated behavioral health conditions at $350 billion for the nation each year. They offered several case studies of health care providers who were able to address unmet behavioral health needs and decrease avoidable utilization successfully. HealthEast was struggling to find SNF placement for medically complex patients with behavioral health conditions. They worked directly with a SNF to provide training and support and saw an increase in referrals to that SNF. Intermountain Healthcare instituted a multi-layered integrated healthcare approach in primary care, including screening and triage, to connect with appropriate services and a registry to track outcomes. Ultimately, they found the intervention group costs were $667 less and were 54% less likely to go to the ED than the control group. OptumHealth trained peer support partners to work with patients at discharge who connected patients to a PCP, community resources, and benefits. They reduced hospital admissions by 79% compared to the prior year and saved $550,000. Wake County Emergency Medical Services (EMS) trained Advanced Practice Paramedics to be able to screen and triage patients in the home and divert them from the ED. Total ED visits dropped 34% over two years and they realized cost savings of $325,000.

Reducing Waste

Reducing waste in healthcare is another opportunity to reduce costs. The IMS Institute for Healthcare Informatics (2013) identified six opportunities for waste reduction in the healthcare field: nonadherence, delayed evidence-based treatment practice, misuse of antibiotics, medication errors, suboptimal use of generics, and mismanaged polypharmacy. According to their analysis, 10 million hospitalizations account for $140 billion in waste, avoidable pharmacy costs from 246 million prescriptions account for $22 billion in waste, and four million avoidable emergency room visits account for $6 billion in waste. They recommend healthcare providers stick to five principles when determining waste reduction strategies. First, focus on patients who are high risk and most vulnerable to wasteful medicine use. Next, engage patients as partners and work with your pharmacists. Third, consider the return on investment of the interventions being discussed. Fourth, continuously monitor the effectiveness of whichever program is implemented. Finally, ensure that compensation models align with the new modes of delivery.

Cutler et al. (2018) completed a literature review of the economic impact of medication non-adherence in 14 different disease groups. They found variation in the cost of nonadherence with greater nonadherence, generally equating to higher costs. Disease-specific averages ranged from $949 to $44,190 (in 2015 USD) per person but were much higher for all-cause nonadherence. In their measurements, they considered total costs, pharmacy costs, inpatient visits, outpatient visits, ED visits, medical costs, and hospitalizations.
Care Variation Reduction

The Advisory Board (2018a) completed a thorough investigation of care variation in the healthcare field and found that those hospitals in the top quartile for performance had both less variation and lower costs. They created a model for achieving high reliability to help guide hospitals in their care variation endeavors, the foundation of which includes actionable clinical analytics (such as the data Centura plans to use from Crimson), frontline clinician engagement, implementation-oriented clinical and effective supply chain management. The next stage is a flywheel where the hospital prioritizes their projects, designs or redresses standards of care, embeds the standards into practice, and measures the outcomes. Finally, the ultimate stage is creating a culture of high reliability through the design, implementation and sustainment of standard performance improvement and change management tools. By creating a standard approach, Centura will have a common language, suite of tools and standard work to drive improvement across each entity.

Advisory Board (2018a) provided several case studies where their model was successfully implemented. Emory focused their care variation reduction efforts on sepsis and reduced mortality by 5%, length of stay by 1.42 days, percentage of days in the ICU by eight percentage points, and sepsis costs by $1.8 million each year by their reduction in the length of stay and percentage of days in the ICU. Christiana Care focused their care variation reduction efforts on stroke care. They reduced duplicate imaging orders by eight percentage points, 98% of patients had care consistent with all TJC core measures and achieved 96% adherence with their protocol across their two-hospital system. Next, Atrium Health focused on AMI. Through their efforts, they saved $40 million over four years by focusing on care variation reduction in general and $3.5 million for AMI since 2015 (in 2018). They also saw a 20% reduction in observed over effective mortality rate, achieved the 90th percentile for mortality and bleeding rates, realized $1.7 million in annual savings for medication substitutions, and $1.8 million in savings over three years from supply negotiation. Lastly, Mission Health System chose to work on COPD. They found the average direct cost per inpatient episode for COPD exacerbation decreased by $1,300 and saw a 14% reduction in the length of stay by using the patient LACE score to risk stratify and followed only those with moderately high-risk for readmission.

When considering how to standardize care across a system, it is essential to keep in mind that 100% compliance with the standards is not the goal as this does not allow for exceptions, rather, Advisory Board (2018b) recommends hospitals aim for 70% to 90% compliance. Such a compliance rate would indicate that standards have been adopted and benefits in quality and cost can be achieved. At the same time physicians feel supported in using clinical judgment to find exceptions as necessary.

Unfortunately, many care variation reduction efforts are never fully implemented or are only short-lived (Advisory Board, 2018c). Many see physician resistance as a significant barrier, but it’s important to question how physician workflow was considered when designing the program to begin with. If facing physician resistance to adoption of standards, the Advisory Board (2018b) recommends anticipating upcoming areas of disagreement by identifying champions and tracking changes and having appropriate channels for iteration such as feedback loops and a process for requesting variation. Utilization of simulation training has also been found to be effective in gaining physician compliance and long-term adoption (Advisory Board, 2018c).

Value Transformation Programs

Value transformation programs, such as Centura’s multidisciplinary clinical teams, offer valuable opportunities for improvement in care variation and, ultimately, improve quality while reducing
costs. Chatfield et al. (2019) studied the value of such improvement programs on patients discharged from a US hospital between September 2011 and December 2017, with a total of 74 value transformation programs beginning in April 2014. The projects focused on the supply chain, operations, caring for patients who were outliers, and resource management. The critical elements of their programs included “joint clinical and operational leadership; granular and transparent cost accounting; dedicated project support staff; information technology support; and a departmental shared savings program” (p. 449). The study found that costs at the hospital decreased 7.7%, DRG admissions decreased .2% per month, length of stay decreased .25% per month (roughly ½ day by the end of the study), they saved an estimated $53.9 million, but saw no impact on readmissions or mortality. In their editorial for the journal opining on this study, Moriates and Valencia (2019) noted that the research provided by Chatfield et al. offers a valuable example of how effective a centralized value improvement program can be for a hospital. They also counsel hospitals to keep in mind the differences between fixed and variable costs when determining return on investment and to remember that reducing the length of stay does not generally save hospitals money until the hospital can also reduce its number of beds and reduce staffing.

Crimson

Pairing our already evidence-informed multidisciplinary clinical teams and councils with Crimson, Centura plans to improve quality while also reducing costs. The technology will allow Castle Rock Adventist Hospital to involve physicians in our work, narrow down our priorities, and monitor our progress (Advisory Board, 2016, see appendix E). Other hospitals across the nation have effectively used this data to improve their outcomes. For example, Overlake Medical Center saw a 2.71% decrease in the rate of complications for surgical outcomes, CentraState Healthcare System saw a 10.3% reduction in 30-day readmissions for three disease states, Tift Regional Medical Center saw a 66% decrease in mortality rate, and Hun Regional Healthcare benefited from $593,000 in charge savings per quarter by implementing new sepsis standards.

SOURCES:


6.

a. Does the focus of the proposed intervention intersect with ongoing initiatives statewide (including, but not limited to those included in the ACC, State Innovation Model and Comprehensive Primary Care Plus)?

☐ Yes
☐ No

b. If yes, please identify the applicable statewide initiative(s): (you may select more than one response from the list below)

- Behavioral Health Task Force
- Affordability Road Map
- IT Road Map
- HQIP
• ACC
• SIM Continuation
• Rx Tool
• Rural Support Fund
• SUD Waiver
• Health Care Workforce
• Jail Diversion
• Crisis Intervention
• Primary Care Payment Reform
• Other: ___ (please identify)

Please also use the space below to briefly explain how the hospital will ensure the intervention aligns with the applicable ongoing initiative(s).

Response (Please seek to limit the response to 750 words or less)

HQIP

This cost quality data intervention intersects with many of the goals of the HQIP program. The HQIP patient safety measures focus on reducing patient harm by increasing quality of care for c. diff and sepsis. This intervention is focused on improving quality and reducing care variation across our system. This focus on reduction in care variation will lead to better outcomes for our patients and improved safety.

7. Please use the space below to explain any experience the hospital or any affiliated community partners have had with this type of intervention or target population and how that experience will support the success of the intervention.

Response (Please seek to limit the response to 500 words or less)

As part of Centura Health, Castle Rock Adventist Hospital has extensive experience working on quality improvement projects. Centura has multidisciplinary clinical teams come together to address issues such as women and children’s care, emergency department, hospitalists, and others. These team/council members are responsible for identifying quality improvement projects to standardize care across our connected ecosystem and improve patient outcomes. They currently utilize the data that is available to them through our electronic health system, Epic, to inform their decisions. This data is useful but limited in that we are only able to compare performance within our system. In addition, each hospital has a quality department that oversees the hospital care provided to the community we serve. The quality department reviews outcomes and works with clinical teams to prioritize work and decrease variation to improve care.

Crimson, a new product for the Centura system, offers expanded data with nationwide benchmarking capacity. This will allow us as a system to compare our performance to national standards and will enable us to better prioritize the projects chosen for quality improvement.

8.

a. Is this an existing intervention in use within the hospital (“existing interventions” are those interventions the hospital has implemented or is implementing on the day it submits the Hospital Application)?
b. If yes, please use the space below to explain how the following criteria for leveraging existing interventions is satisfied (the response may reference answers above):

- The hospital must demonstrate that the use of the existing intervention is the best approach for meeting the needs of the community identified during the Community and Health Neighborhood Engagement process.
- The hospital must demonstrate that the project will be enhanced to meet HTP goals.

Response (Please respond as applicable; Please seek to limit the response to 1,000 words or less)
This is not an already existing intervention used in our hospital; however, Castle Rock Adventist Hospital will be utilizing already existing resources to achieve the desired results described within this intervention. For example, the multidisciplinary teams and councils, and quality departments will be responsible for using the data to inform their decisions and prioritize quality improvement work.

9.

a. Will the intervention be a joint effort with another organization (e.g., a Regional Accountable Entity, Local Public Health Agency, a mental or community health center, another community organization or any other external organization)?

☐ Yes
☒ No

Partnerships are not required, but, if the hospital will partner, please complete the remainder of this question and provide the required documentation (see subpart c).

b. If yes, please complete the following chart, including listing the partner organization; listing the type of organization; indicating whether the hospital has previously partnered with the organization; and providing a high-level summary of the expected role of the organization in intervention’s leadership and implementation.

<table>
<thead>
<tr>
<th>Partner Organization Name</th>
<th>Type of Organization</th>
<th>Does the hospital have any previous experience partnering with this organization? (Yes or No)</th>
<th>Organization’s Role in Intervention Leadership and Implementation (high-level summary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Partnerships are not required, but, if the hospital will partner, please complete the remainder of this question and provide the required documentation (see subpart c).

b. If yes, please complete the following chart, including listing the partner organization; listing the type of organization; indicating whether the hospital has previously partnered with the organization; and providing a high-level summary of the expected role of the organization in intervention’s leadership and implementation.

<table>
<thead>
<tr>
<th>Partner Organization Name</th>
<th>Type of Organization</th>
<th>Does the hospital have any previous experience partnering with this organization? (Yes or No)</th>
<th>Organization’s Role in Intervention Leadership and Implementation (high-level summary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

c. Please also submit documentation of the partnership with each listed organization. Documentation may be provided separately for each organization listed above and could include: a contract; a memorandum of understanding; a business association agreement; a
Letter of Partnership from the listed organization(s); or similar documentation. If a Letter of Partnership is provided, in it the organization should: (1) acknowledge that it intends to partner; (2) provide a brief description of the organization; (3) express agreement with the planned intervention; and (4) express agreement with the planned role it will have in leadership and implementation of the intervention as expressed above. The letter should be signed by a member of the organization’s management and submitted with this application in the same .pdf document. The Letter of Partnership Template can be found on the HTP webpage.
Hospital Transformation Program

Intervention Proposal

I. Background Information

This Intervention Proposal is designed to clearly articulate the scope and goals of proposed transformation interventions aimed at impacting the hospital’s selected local quality measures under the HTP. The following questions are meant to assist the state in identifying: the evidence base for each intervention; the need within targeted communities for the implementation of the interventions; and how the interventions will advance the goals of the HTP.

Hospitals will not be required to implement a specified number of interventions. Instead, participation requirements are based on the selection of local quality measures to impact within the five HTP Focus Areas:

- Reducing Avoidable Hospital Utilization
- Core Populations
- Behavioral Health and Substance Use Disorders
- Clinical and Operational Efficiencies
- Community Development Efforts to Address Population Health and Total Cost of Care

Hospitals will be required to address statewide measures for each Focus Area. Hospitals will also be required to select from the HTP list of local measures across the five Focus Areas based on community needs and the goals of the HTP. Each hospital will be required to work on a set of measures equal to 100 points. The number, mix and points per measure will vary according to hospital size, defined by bed count or specialty type:

- Large hospitals (91+ beds) will be accountable for six statewide measures, totaling 60 points and a minimum of four local measures, which will account for 40 points. Points per local measure will equal 40 divided by the number of local measures selected.
- Medium hospitals (26-90 beds) will be accountable for six statewide measures and a minimum of two local measures. If two local measures are selected, statewide measures will total 75 points, and local measures will account for 25 points. Points per local measure will equal 25 divided by the number of local measures selected. If three local measures are selected, then statewide measures will total 67 points and local measures will account for 33 points. Points per local measure will equal 33 divided by the number of local measures selected. If four or more local measures are selected, then statewide measures will then total 60 points and local measures will account for 40 points. Points per local measure will equal 40 divided by the number of local measures selected.
- Small hospitals (<26 beds) excluding critical access hospitals will be accountable for six measures (statewide or local) to account for 100 points. Points per each measure will equal 100 divided by the number of measures selected.
- Critical access hospitals will be accountable for six measures (statewide or local) and will have their risk for measures reduced by 40%.
- Pediatric hospitals will be accountable for five statewide measures, totaling 50 points and a minimum of five local measures, which will account for 50 points. Points per local measure will equal 50 divided by the number of local measures selected.
- Respiratory specialty hospital(s) will be accountable for four statewide measures and a minimum of four local measures. If four measures are selected then statewide measures will total 56 points and local measures will account for 44 points. Points per local measure will equal 44 divided by the number of local measures selected. If five or more measures are selected, then statewide measures will total 50 points and local measures will total 50 points. Points per local measure will equal 50 divided by the number of local measures selected.

Hospitals have the option to work on local measures beyond the required minimum. This would spread the local measure risk by reducing the points per local measure.

In addition, hospitals have the option to replace a local measure with a statewide priority. Each statewide priority will be worth 20 points and if selected the points for each remaining local measure will be equal to the remaining total required local measure points divided by the number of local measures, greatly reducing the risk associated with those measures.

Hospitals should consult the Measure Scoring Summary, which can be found on the HTP webpage, for more information about measure selection, requirements and scoring.

Hospitals must then design five-year interventions that will impact their selected quality measures.

Hospitals must demonstrate that their proposed interventions will fulfill the goals of the HTP and are evidence-based. They must also justify the selection of each intervention based on the findings of the Community and Health Neighborhood Engagement process, including the environmental scan and feedback.

Each hospital will need to report its own data and submit its own application, but partnerships between hospitals may occur in some instances.

Hospitals may leverage existing resources for interventions, and existing interventions may be considered insofar as they expand or enhance the Department’s noted goals and meet the following criteria:

- The hospital must demonstrate that the existing intervention is being selected because it is the best approach for meeting the needs of the community identified during the Community and Health Neighborhood Engagement process.
- The hospital must demonstrate that the intervention can and will be enhanced to meet HTP goals.

In addition to meeting the above criteria, any hospital proposing existing interventions for participation in the HTP will be expected to propose and implement accelerated milestones in the Implementation Plan for such interventions.

This Intervention Proposal must be completed separately for each of the interventions being proposed for inclusion in the HTP. Hospitals must submit interventions that, together, address all of the statewide quality measures and the local quality measures listed in the hospital’s response to Question 6 in the Hospital Application.
II. Overview of Intervention

1. Name of Intervention: **Length of stay and readmission committee**

2. Please use the table below to identify which statewide and selected local quality measures (from the hospital’s response to Question 6 in the Hospital Application) the hospital will address through this intervention. As a reminder, each of the statewide and selected local quality measures must be identified for at least one intervention. As such, if this is the only intervention addressing a given Focus Area, all statewide quality measures and all selected local quality measures for that Focus Area must be included in this response. This response should align with the intervention-specific list included in the response to Question 7 in the Hospital Application.

Please note, hospitals are also required to complete the Intervention Proposal below for statewide priorities identified in Question 6 of the HTP Hospital Application.

Please use the unique identification code from the Performance Measures List (which is available on the HTP website) to identify your selected measures. For example, the measure “30 Day All Cause Risk Adjusted Hospital Readmission” should be listed as SW-RAH1.

Response (Please format the response as a numbered list)

1. SW-PH1
2. SW-RAH1
3. CP1

3. Please use the space below to describe the intervention and the rationale for its selection.

   Responses should include:
   - A description of the intervention; and
   - How the intervention advances the goals of the HTP.

Response (Please seek to limit the response to 1,000 words or less)

- A description of the intervention.

In order to decrease our length of stay and reduce our rates of readmission, Castle Rock Adventist Hospital will convene a length of stay and readmission committee. This committee will be facilitated by the case management team and potentially include appropriate members as needed from our hospitalist group, ED physicians, nursing representatives, psychiatric assessors, quality team members, and others. We plan to meet regularly to review our length of stay and readmissions data from Epic, our electronic health record, and Crimson Continuum of Care, a data infrastructure that pairs data insights with proven performance strategies to impact cost reduction and quality improvement at hospitals. Using this data, we will strategize projects at our hospital to improve upon these metrics.

In order to successfully implement this length of stay and readmission committee intervention, we have identified several needs.

- Creation of a standardized charter.
• Build the infrastructure within and across Centura’s connected ecosystem to continually monitor projects and progress through dashboards.

• Determine best way to disseminate information from Centura enterprise to the hospital-specific committee.

These opportunities will be described in more detail in our implementation plan, along with a schedule of completion for our milestones.

• How the intervention advances the goals of the HTP.

This one length of stay and readmission committee intervention advances all five of the HTP goals.

1. We hope to improve patient outcomes through care redesign and integration of care across settings by using data to inform how best to improve length of stay and reduce readmissions. The projects chosen may involve participation from multiple hospital departments and could include community partners such as SNFs and home care providers. Reducing the length of stay would mean lower chances of hospital-acquired infections for patients and fewer readmissions would indicate better outcomes and follow-up care.

2. Second, we plan to improve the patient experience in the delivery system by ensuring appropriate care in appropriate settings. By working to reduce length of stay and readmissions, we will, by default, have to improve patient follow-up care, which would indicate that more patients are receiving care outside of the acute care setting and instead receiving care with primary care providers or outpatient specialists.

3. Next, our intervention will lower Health First Colorado costs by avoiding readmissions and decreasing length of stay. Such improvements would mean fewer days of expensive acute care would need to be covered by Medicaid.

4. Additionally, we hope to accelerate our readiness for value-based payments. We plan to focus on improving outcomes and decreasing the likelihood of readmissions. Getting patients out of the hospital sooner will reduce costs and reduce the chances of hospital-acquired conditions.

5. Finally, we hope to increase collaboration between our hospital and other providers. Our partners will not be involved on the committee themselves, but the data provided may indicate that we would benefit by working with community partners.

4. Please use the space below to describe how the intervention and any selected local quality measures to be addressed by the intervention align with community needs identified throughout the Community and Health Neighborhood Engagement process (including data identified in the hospital’s CHNE midpoint and final reports), including but not limited to:

• How the intervention and any selected local quality measures to be addressed by the intervention were selected based on identified community needs, including how they align with identified significant behavioral and physical health needs and / or service capacity resources and gaps, including related to care transitions and social determinants of health;

• How the population of focus aligns with identified community needs; and

• How the proposed intervention will leverage available medical and / or social resources and partners.
Response (Please seek to limit the response to 1,500 words or less)

- How the intervention and any selected local quality measures to be addressed by the intervention were selected based on identified community needs, including how they align with identified significant behavioral and physical health needs and or service capacity resources and gaps, including related to care transitions and social determinants of health.

This length of stay and readmission committee intervention aligns with the community needs that were identified during our Community and Health Neighborhood Engagement (CHNE) process. Although the scope of this project is broadly focusing on the length of stay and readmissions and our community had specific needs in mind, this intervention will address overarching needs for quality care, reducing unnecessary utilization, reducing the length of stay, and decreasing rates of readmission through improved care in the hospital setting.

The stakeholders engaged in our CHNE process were highly concerned about behavioral health and social needs, with a particular concern for co-occurring behavioral and physical health conditions. Many mentioned the frequency of alcohol use, which is a very common APR-DRG in our hospital and often occurs in conjunction with complicating physical health needs. Our community also mentioned a desire to address chronic conditions such as overweight/obesity and hypertension, which seem to be on the rise in Colorado.

Social needs were mentioned in many ways during our CHNE process. Housing was a significant concern for the community; the steep cost of housing can lead to instability in family life, making other necessities difficult to provide. An increase in rent could result in a family needing to relocate after years of establishing social connections and community in a neighborhood. Homelessness is also a big concern for our community. For those experiencing mental illness or substance use disorders, employment can be challenging to find and maintain, leading to financial difficulties and an undue burden of stress. Some in the area may also experience limited healthy food options, either because they do not live near grocery stores or because the cost is prohibitive. Those who are elderly face unique social needs in that transportation can be a barrier for them getting to appointments and palliative care can be difficult to finance.

Capacity was another gap identified by our community. There are not always enough PCPs or specialty care providers to address the needs of the population. Access is even more restricted for patients with Medicaid, which not all providers accept. Adding to the difficulty is finding appointments during evening and weekend hours for working patients or providers who speak the same language as the patient. Care coordination and transitions are also lacking in our community and can be particularly problematic to find for patients who have been diagnosed with more than one chronic condition. Additionally, home care, skilled nursing, and long-term acute care services are limited for patients with Medicaid and are not always of the best quality.

Our proposed intervention could have the potential to lower readmission rates, decrease the length of stay, and improve patient care and outcomes. While our focus with this intervention is broad, it will emphasize the needs of our Medicaid population, which generally includes individuals who are more vulnerable to poorer outcomes and may have additional needs, thereby addressing our community’s concerns.

- How the population of focus aligns with identified community needs.
Our population of focus for this intervention will be all Centura patients, with an emphasis on improving Medicaid patient length of stay and readmission rates. We plan to use data for all patients but will also separate it out by insurance type so that we can ensure we are meeting the needs of our Medicaid patients specifically. By emphasizing Medicaid patient outcomes, we will be looking at patients who are more vulnerable in general to poor outcomes and readmissions. We will also be turning a critical eye on potentially avoidable care with the hope of reducing costs and improving quality. We will also be addressing our community’s expressed needs for improved follow-up care, access to care, and the quality of home care.

- How the proposed intervention will leverage available medical and/or social resources and partners.

Although we will not be working explicitly with community partners on this intervention, the data used to inform our work and the resulting projects, identified and implemented through our committee, will provide the fuel needed to have meaningful conversations with our community partners such as SNFs, home care agencies, PCP offices, our local FQHC, and possibly the RAE. We will, however, leverage available medical resources by encouraging collaboration across hospital settings. Such projects could require the involvement of multiple disciplines and hospital departments. We hope to improve outcomes by engaging caregivers across the spectrum of hospital roles in a manner that inspires data-driven improvement.

5. Please identify the evidence base (academic, professional or otherwise) related to this intervention’s use among the target population by selecting one of the following options:

(1) Randomized Control Trial (RCT) level evidence
(2) Best practice supported by less than RCT evidence
(3) Emerging practice
(4) No evidence

If you selected option 1, 2 or 3 above, please use the space below to summarize the evidence base (academic, professional or otherwise) related to this intervention’s use among the target population. The response should address the intervention’s ability to impact the selected local and statewide quality measures identified in Question 6 in the Hospital Application. Please submit the response in narrative form and provide links to any reference documentation (data, citations, etc.).

If you selected option 4 indicating that there is no known evidence base, please explain why this intervention is being proposed regardless.

Response (Please seek to limit the response to 1,500 words or less)

(3) Emerging practice

Both length of stay and rates of readmissions are important outcome indicators in the healthcare field. According to research completed by the Advisory Board (2013), patient safety is put at risk when a facility reaches 85% capacity; additionally, patients who are admitted have an 18% risk of acquiring an infection from the hospital and that risk increases by 2% for each additional night spent in the hospital, making reduction in the length of stay and readmissions vitally important to patient wellbeing. Important trends in the data indicate that improvement on both is possible. For example, Ottenbacher et al. (2000) looked at medical rehab patients from 1994 through 1998 and found that both length of stay and readmission rates decreased over those four years. According to an analysis
by Advisory Board (2018) of Medicare claims from quarter 1 of 2013 through quarter 2 of 2018, both have gone down. Further analysis indicates that length of stay decreased by 0.3 days regardless of whether or not the patient received post-acute care and readmissions decreased even greater for patients who discharge to a post-acute care environment.

There are many reasons that a patient might readmit or have a longer length of stay. Advisory Board (2019) outlines several reasons for longer lengths of stay; specifically, the reasons care transitions are delayed and how hospitals can address them. For instance, when dealing with patients who will likely need complex care placement, it is important to identify those patients early. When insurance preauthorization is needed for post-acute care, hospitals can send referrals to placement resources early on to give them the time necessary to work out potential insurance issues. Additionally, hospitals should meet regularly with the care team for updates and planning recommendations to avoid clinical complications from coming up at discharge. For those patients with transportation needs, hospitals might look to partner with transportation services for low-cost solutions that will aid in discharge. Finally, hospitals should partner with post-acute care facilities to time their own discharge with the accepting facility’s intake times. Optimization of a facility’s electronic health record is another strategy that could help cut back on the length of stay (Advisory Board, 2014). Some of the best tools to use, include computerized practitioner order entry (CPOE) and interventions associated with decision support. CPOE can help cut back on errors and delays that combine with transcribing orders. Another important strategy advised by the Advisory Board (2014) is combining ambulatory, ED, and inpatient records, which allows for a seamless, convenient record review by the care team.

Some in the healthcare field might worry that reducing the length of stay could have the unintended effect of increasing rates of readmission. However, the literature shows us that it is possible to reduce the length of stay, improve quality, and not increase readmissions. Kaboli et al. (2012) conducted an observational study at all 129 VA hospitals in the United States, reviewing over 4 million admissions from 1997 to 2010. During that time, they found that the length of stay decreased by 1.46 days from 5.44 to 3.98 days, about 2% annually. They also discovered that the risk-adjusted 30-day readmission rates decreased from 16.5% to 13.8% while all-cause mortality 90 days after admission decreased by 3% annually. They did find that those hospitals with a lower than the expected length of stay had higher readmissions, but still concluded that it is possible to reduce the length of stay without increasing readmissions. Additionally, Weber et al. (2011) reviewed a program for a one-day stay for unilateral mastectomy patients and found an increase in one-day stays from 9.6% of cases to 82.7% of cases with a 0.9% readmission rate, none of which were related to the decreased the length of stay.

Many successful examples of the length of stay and readmission reduction programs are exhibited in the literature, some of which have the additional benefit of cost savings, and Castle Rock Adventist Hospital may use these as models for the chosen projects moving forward with our committee.

A Rapid Evidence Assessment of studies completed in the United States, Australia, the United Kingdom, and other European countries identified promising practices for reducing the length of stay as ones that included multidisciplinary teams, enhanced discharge planning, early discharge programs that focused on the length of stay, and clinical care pathways (Miani et al., 2014). Archer et al. (1997) determined that a clinical pathway for total colectomy and ileal pouch/anal anastomosis surgeries decreased the length of stay from 10.3 days to 7.5 days and decreased hospital charges from $21,650 to $17,958 per patient. They credit the hospital’s multidisciplinary team involvement, eliminating wastes, and streamlining of services for the success. Weingarten et al.
The Colorado Healthcare Affordability and Sustainability Enterprise (CHASE) is a government-owned business within the Department of Health Care Policy and Financing. www.colorado.gov/hcpf

(1998) determined that practice guidelines intended to reduce the length of stay for several orthopedic conditions could be beneficial for reducing length of stay without major changes in patient outcomes. Webster et al. (2005) found that a clinical pathway for laparoscopic pyeloplasty with structured orders sets and imaging was successful in reducing the length of stay and maintained 87% high patient satisfaction rates with no readmissions. The use of practice guidelines was similarly beneficial for reducing the length of stay for upper GI hemorrhage patients (Hay, Maldonado, Weingarten, and Ellrodt, 1997) and patients admitted to coronary and intermediate care units with chest pain (Weingarten et al., 1994).

Shields, Clark, Glassman, and Shields (2017) credited a multidisciplinary committee’s impact on decreased length of stay and costs of care for spinal fusion patients, stating that the success was due to “effective patient discharge plan, patient education, partnerships with rehabilitation facilities, and study review and discussion among physicians and staff” (no page). Such a model could be used for our hospital’s committee as we work to improve discharge planning to reduce the length of stay and readmissions.

Similar conclusions have been drawn regarding efforts to decrease rates of readmissions. Multidisciplinary teams are important in forming readmission reduction plans, such as in the example of Kasper et al. (2002) who found that a multidisciplinary model working on reducing readmissions and mortality for CHF not only worked, but also worked at a similar cost as the usual care group.

SOURCES:


6. a. Does the focus of the proposed intervention intersect with ongoing initiatives statewide (including, but not limited to those included in the ACC, State Innovation Model and Comprehensive Primary Care Plus)?

☐ Yes
No

b. If yes, please identify the applicable statewide initiative(s): (you may select more than one response from the list below)

- Behavioral Health Task Force
- Affordability Road Map
- IT Road Map
- HQIP
- ACC
- SIM Continuation
- Rx Tool
- Rural Support Fund
- SUD Waiver
- Health Care Workforce
- Jail Diversion
- Crisis Intervention
- Primary Care Payment Reform
- Other: ___ (please identify)

Please also use the space below to briefly explain how the hospital will ensure the intervention aligns with the applicable ongoing initiative(s).

Response (Please seek to limit the response to 750 words or less)

Affordability Road Map

This length of stay and readmission committee intervention aligns with the state’s Affordability Road Map. By reducing the length of stay and rates of readmission for our patients we hope to lower healthcare costs for patients and the state’s Medicaid program. Lower lengths of stay and reduced readmissions indicate a reduction in the need for costly acute care, thereby lowering costs for health care consumers.

7. Please use the space below to explain any experience the hospital or any affiliated community partners have had with this type of intervention or target population and how that experience will support the success of the intervention.

Response (Please seek to limit the response to 500 words or less)

Some hospitals in the Centura system have had success in conducting their length of stay and/or readmission committees. For example, Penrose-St. Francis in Colorado Springs has been conducting an interdisciplinary readmissions committee for the last two years. They include a transitions of care coordinator who completes deep dives into cases of readmission to determine the root cause of the need for additional acute care. Through this work, they have discovered that most of their readmissions come from SNFs. They decided to work with SNFs to ensure that the medication reconciliation for patients discharged to the facility is correct and that they are following best practices when discharging the patient to home care, for example, scheduling follow-up appointments. Other work they have begun includes working directly with home care programs and utilizing volunteer retired nurses to conduct follow-up calls with patients 24-48 hours after discharge.
Similarly, Avista Adventist Hospital has been able to lower their overall readmission rate to below 3% through the work of their multi-disciplinary committee. They discovered that most of their readmissions return to the hospital after two days and that the highest readmission rate is among patients with a one-day length of stay. They instituted a meds-to-beds program with the pharmacy teaching discharging patients about the medications they will be taking once they return home. Furthermore, they are working to schedule follow-up PCP appointments sooner and sooner after discharge and use data to look at readmissions by attending provider to improve provider-driven readmissions.

Castle Rock Adventist Hospital also has a readmission committee which currently includes case management, the quality director, the patient safety program manager, the acute care manager, the CMO, and the lead hospitalist. Other stakeholders are invited depending on the topic discussed. The committee has been meeting for 2 years with a focus on evidence-based practices to decrease readmissions. The first project was to assure follow up within 7 days for all patients with COPD and pulmonary diagnoses, as this was their highest readmission rate at the time. We instituted a program of follow up in collaboration with our pulmonary providers to arrange a follow up visit and phone call within 7 days. This practice has successfully decreased our readmission rates for that particular chronic condition. We also utilize the LACE+ score to determine a patient’s risk for readmission from time of admission. We have developed patient education to assist with arranging prompt follow-up with their outpatient health care provider as many of our patients are not able to obtain a prompt appointment. We are in the process of implementing a Transitional Care visit with one of our local PCPs in order to bridge the transition from the hospital to the patient’s regular PCP.

Furthermore, a separate Utilization Review committee meets quarterly to discuss average LOS based on diagnosis. The members of the UR committee currently include the CMO, CFO, CNO, case management manager, and UR nurse(s). An outlier case is reviewed in each meeting and the report of Avoidable Days is reviewed to verify reasons for which patients did not discharge once they were medically stable.

We plan to combine the LOS committee and the Readmission group in order to correlate readmissions to LOS.

As part of Centura Health, Castle Rock Adventist Hospital is in a position to learn from our past experience and work with our sister hospitals to learn from their experiences and inform our own practices moving forward with this intervention.

8.

a. Is this an existing intervention in use within the hospital (“existing interventions” are those interventions the hospital has implemented or is implementing on the day it submits the Hospital Application)?

☑ Yes
☐ No

b. If yes, please use the space below to explain how the following criteria for leveraging existing interventions is satisfied (the response may reference answers above):
The Colorado Healthcare Affordability and Sustainability Enterprise (CHASE) is a government-owned business within the Department of Health Care Policy and Financing.

- The hospital must demonstrate that the use of the existing intervention is the best approach for meeting the needs of the community identified during the Community and Health Neighborhood Engagement process.
- The hospital must demonstrate that the project will be enhanced to meet HTP goals.

Response (Please respond as applicable; Please seek to limit the response to 1,000 words or less)

This intervention is already in existence at Castle Rock Adventist Hospital. We plan to continue to use it to address our length of stay and readmission rates as it meets the needs that our community laid out for us during the CHNE process and that the data indicate is necessary. This intervention has the option to increase our collaboration with community partners, ensure stronger follow-up care, reduce inappropriate usage of acute care setting, and allow us to focus on our Medicaid population which tends to be more vulnerable to poorer outcomes and social needs.

We plan to enhance this intervention for the purposes of HTP through several means. We currently meet quarterly, moving forward, we will meet monthly which will allow for greater effort and attention to be spent on this issue. We will also create a standardized charter which will outline responsibilities and expectations. We will make use of enterprise-wide quality data metrics from Crimson Continuum of Care to inform our decisions. We will also look specifically at how we can best impact our Medicaid patients. Finally, Castle Rock Adventist Hospital will address both the length of stay and readmissions in one committee to ensure that we do not unintentionally increase readmissions by lowering our length of stay or vice versa. These enhancements will be finalized and addressed in more detail in our implementation plan.

9.

a. Will the intervention be a joint effort with another organization (e.g., a Regional Accountable Entity, Local Public Health Agency, a mental or community health center, another community organization or any other external organization)?

☐ Yes
☒ No

Partnerships are not required, but, if the hospital will partner, please complete the remainder of this question and provide the required documentation (see subpart c).

b. If yes, please complete the following chart, including listing the partner organization; listing the type of organization; indicating whether the hospital has previously partnered with the organization; and providing a high-level summary of the expected role of the organization in intervention’s leadership and implementation.

<table>
<thead>
<tr>
<th>Partner Organization Name</th>
<th>Type of Organization</th>
<th>Does the hospital have any previous experience partnering with this organization? (Yes or No)</th>
<th>Organization’s Role in Intervention Leadership and Implementation (high-level summary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

The Colorado Healthcare Affordability and Sustainability Enterprise (CHASE) is a government-owned business within the Department of Health Care Policy and Financing. www.colorado.gov/hcpf
c. Please also submit documentation of the partnership with each listed organization. Documentation may be provided separately for each organization listed above and could include: a contract; a memorandum of understanding; a business association agreement; a Letter of Partnership from the listed organization(s); or similar documentation. If a Letter of Partnership is provided, in it the organization should: (1) acknowledge that it intends to partner; (2) provide a brief description of the organization; (3) express agreement with the planned intervention; and (4) express agreement with the planned role it will have in leadership and implementation of the intervention as expressed above. The letter should be signed by a member of the organization’s management and submitted with this application in the same .pdf document. The Letter of Partnership Template can be found on the HTP webpage.
Hospital Transformation Program

Intervention Proposal

I. Background Information

This Intervention Proposal is designed to clearly articulate the scope and goals of proposed transformation interventions aimed at impacting the hospital’s selected local quality measures under the HTP. The following questions are meant to assist the state in identifying: the evidence base for each intervention; the need within targeted communities for the implementation of the interventions; and how the interventions will advance the goals of the HTP.

Hospitals will not be required to implement a specified number of interventions. Instead, participation requirements are based on the selection of local quality measures to impact within the five HTP Focus Areas:

- Reducing Avoidable Hospital Utilization
- Core Populations
- Behavioral Health and Substance Use Disorders
- Clinical and Operational Efficiencies
- Community Development Efforts to Address Population Health and Total Cost of Care

Hospitals will be required to address statewide measures for each Focus Area. Hospitals will also be required to select from the [HTP list of local measures](#) across the five Focus Areas based on community needs and the goals of the HTP. Each hospital will be required to work on a set of measures equal to 100 points. The number, mix and points per measure will vary according to hospital size, defined by bed count or specialty type:

- Large hospitals (91+ beds) will be accountable for six statewide measures, totaling 60 points and a minimum of four local measures, which will account for 40 points. Points per local measure will equal 40 divided by the number of local measures selected.
- Medium hospitals (26-90 beds) will be accountable for six statewide measures and a minimum of two local measures. If two local measures are selected, statewide measures will total 75 points, and local measures will account for 25 points. Points per local measure will equal 25 divided by the number of local measures selected. If three local measures are selected, then statewide measures will total 67 points and local measures will account for 33 points. Points per local measure will equal 33 divided by the number of local measures selected. If four or more local measures are selected, then statewide measures will then total 60 points and local measures will account for 40 points. Points per local measure will equal 40 divided by the number of local measures selected for four or more local measures.
- Small hospitals (<26 beds) excluding critical access hospitals will be accountable for six measures (statewide or local) to account for 100 points. Points per each measure will equal 100 divided by the number of measures selected.
- Critical access hospitals will be accountable for six measures (statewide or local) and will have their risk for measures reduced by 40%.
• Pediatric hospitals will be accountable for five statewide measures, totaling 50 points and a minimum of five local measures, which will account for 50 points. Points per local measure will equal 50 divided by the number of local measures selected.
• Respiratory specialty hospital(s) will be accountable for four statewide measures and a minimum of four local measures. If four measures are selected then statewide measures will total 56 points and local measures will account for 44 points. Points per local measure will equal 44 divided by the number of local measures selected. If five or more measures are selected, then statewide measures will total 50 points and local measures will total 50 points. Points per local measure will equal 50 divided by the number of local measures selected.

Hospitals have the option to work on local measures beyond the required minimum. This would spread the local measure risk by reducing the points per local measure.

In addition, hospitals have the option to replace a local measure with a statewide priority. Each statewide priority will be worth 20 points and if selected the points for each remaining local measure will be equal to the remaining total required local measure points divided by the number of local measures, greatly reducing the risk associated with those measures.

Hospitals should consult the Measure Scoring Summary, which can be found on the HTP webpage, for more information about measure selection, requirements and scoring.

Hospitals must then design five-year interventions that will impact their selected quality measures.

Hospitals must demonstrate that their proposed interventions will fulfill the goals of the HTP and are evidence-based. They must also justify the selection of each intervention based on the findings of the Community and Health Neighborhood Engagement process, including the environmental scan and feedback.

Each hospital will need to report its own data and submit its own application, but partnerships between hospitals may occur in some instances.

Hospitals may leverage existing resources for interventions, and existing interventions may be considered insofar as they expand or enhance the Department’s noted goals and meet the following criteria:
• The hospital must demonstrate that the existing intervention is being selected because it is the best approach for meeting the needs of the community identified during the Community and Health Neighborhood Engagement process.
• The hospital must demonstrate that the intervention can and will be enhanced to meet HTP goals.

In addition to meeting the above criteria, any hospital proposing existing interventions for participation in the HTP will be expected to propose and implement accelerated milestones in the Implementation Plan for such interventions.

This Intervention Proposal must be completed separately for each of the interventions being proposed for inclusion in the HTP. Hospitals must submit interventions that, together, address all of the statewide quality measures and the local quality measures listed in the hospital’s response to Question 6 in the Hospital Application.
II. Overview of Intervention

1. Name of Intervention: Stroke education and enhanced quality monitoring

2. Please use the table below to identify which statewide and selected local quality measures (from the hospital’s response to Question 6 in the Hospital Application) the hospital will address through this intervention. As a reminder, each of the statewide and selected local quality measures must be identified for at least one intervention. As such, if this is the only intervention addressing a given Focus Area, all statewide quality measures and all selected local quality measures for that Focus Area must be included in this response. This response should align with the intervention-specific list included in the response to Question 7 in the Hospital Application.

Please note, hospitals are also required to complete the Intervention Proposal below for statewide priorities identified in Question 6 of the HTP Hospital Application.

Please use the unique identification code from the Performance Measures List (which is available on the HTP website) to identify your selected measures. For example, the measure “30 Day All Cause Risk Adjusted Hospital Readmission” should be listed as SW-RAH1.

Response (Please format the response as a numbered list)

1. RAH4
2. SW-RAH1
3. SW-COE1

3. Please use the space below to describe the intervention and the rationale for its selection.

   Responses should include:
   - A description of the intervention; and
   - How the intervention advances the goals of the HTP.

Response (Please seek to limit the response to 1,000 words or less)

- A description of the intervention.

Stroke creates a substantial economic burden on the health care system across the US. In 2013, stroke was the cause of 1 in every 20 deaths in the US. On average, someone in the US has a stroke every 40 seconds, and someone dies of one about every 4 minutes. Stroke also accounts for 889,000 hospitalizations per year. Stroke survivors have an increased risk of recurrent stroke and death. Managing comorbidities such as hypertension, hypercholesterolemia, diabetes, and smoking is essential to preventing recurrent strokes.

Evidence-based recommendations for secondary stroke prevention have been published extensively and the best medical therapy to control vascular risk factors with antiplatelets, high-dose statins, blood pressure-lowering medications, and education for lifestyle modifications should be implemented at discharge from acute care hospitals. Despite existing guidelines for the management of stroke patients, Centura currently has inconsistencies between facilities in stroke management for patients upon discharge. These inconsistencies include variation both in how statin medications are prescribed and discharge care instructions.
In order to reduce risk of recurrent stroke, economic burden, and stroke readmissions, Castle Rock Adventist Hospital plans to validate our workflow, distribute provider education, and enhance our quality monitoring of this metric. Dashboards summarizing compliance will be created so that our Stroke Council can oversee compliance with statin prescriptions and ensure success for our patients and their stroke outcomes.

As part of Centura Health, Castle Rock Adventist’s stroke practice guidelines are influenced by a neurosciences multidisciplinary team across our connected ecosystem. The neuro team is composed of physicians, stroke coordinators, and other medical staff with expertise in stroke care who continually review quality metrics for the system, recommend changes to care guidelines based on new evidence, develop new order sets, set standards of care for all the Centura hospitals as it relates to neurological care, and oversee our accredited primary and comprehensive stroke programs. For this intervention, the neuro team and/or their designees will review the existing workflow and applicable tools and educate providers on the updates and contraindications for prescribing statins. The neuro team participants or their designees will use their knowledge of best practices to identify what should be included in the updates. The neuro team will work with our Centura Epic IT team to develop the updates, test for efficacy, and improve Epic electronic workflows as necessary so that all stroke patients receive the standardized stroke care. Also, before the updates are published, the neuro team and/or its designees will create a communication, education, and roll-out plan that will reach physicians across our connected ecosystem. Such updates and education will ensure that patients diagnosed with stroke will be discharged in a standardized manner, reducing the variation of practice, and ensure evidence-based recommendations are being provided to all our stroke patients, thereby reducing the economic burden on our system from secondary strokes and stroke readmissions.

Additionally, Castle Rock Adventist Hospital will add compliance with stroke patients being discharged on statin medications as a recurring agenda item to our Stroke Council. The addition of this agenda item will guarantee the ongoing oversite of the measure, allow the team to quickly identify variations, and promptly course-correct if any variation has been identified. By engaging our quality and stroke experts through our meeting infrastructure, we will keep this quality measure top of mind.

Several opportunities already have been identified that are essential for this stroke intervention to be successful. More details will be shared in our implementation plan. Our plan is to review and update existing tools, test or examine updates for efficacy, make updates within our electronic health record, educate providers, educate our Stroke Council on how to oversee and drive improvement for this quality measure, and build the infrastructure within and across our system to continuously monitor through dashboards, councils, and experts. Our main goal is to achieve 100% compliance with prescribing a statin for stroke patients at discharge.

- How the intervention advances the goals of the HTP.

This one stroke protocol update intervention will all five HTP goals.

1. First, it will improve stroke patient long-term outcomes through care redesign. Updating and implementing a standardized protocol for stroke patients will be a new approach at our hospital for this patient population and will help ensure that our practices are aligned with evidence-based care that has the best chance of improving patients’ long-term outcomes.
2. Secondly, this will improve the patient experience by ensuring that the patient receives the appropriate care in the appropriate setting. Discharging stroke patients on statin medications is an evidence-based practice demonstrated to reduce the risk of recurrent stroke, hospital readmissions, and, in turn, the economic burden. It also has been shown that it is appropriate to ensure that statin education should be communicated to the patient upon discharge from an inpatient setting. One of the needs identified by our communities was that it can be difficult to find specialty care, so it is important to give education regarding statins to the patient while they are still in the hospital where questions can be asked versus waiting for patients to have their follow-up care where they receive the next statin prescription.

3. Next, this intervention will help lower Health First Colorado costs. By ensuring that all stroke patients are discharged on statin medications (as appropriate), we will be working to prevent recurrent strokes and future hospitalization, which will help lower Medicaid costs.

4. Additionally, this intervention will accelerate Castle Rock Adventist’s readiness for value-based payments. By focusing on evidence-based practices that improve patient outcomes, we will be preventing readmissions. We will also be adding additional accountability to providers through a more robust quality monitoring system by addressing this measure at least quarterly in our Stroke Council.

5. Finally, Centura will continue to work collaboratively with community organizations to educate the public and increase awareness of strokes and stroke symptoms. Centura hosts an annual Stroke Aware Fair in May to educate Centura associate, but it is also open to the public. Centura’s Neurosciences Social Worker serves on the board of the Rocky Mountain Stroke Center. Other options for collaboration open to Centura include presenting information at local festivals and fairs including 9 News health fairs and working with Brain Injury Alliance of Colorado. Centura has also sponsored TV, internet, and radio ads related to risk factor awareness and stroke response “Call 911”. Centura collaborates with EMS agencies throughout the state and supports smaller critical access hospitals across Colorado. Such collaboration will continue throughout the duration of this intervention and the Hospital Transformation Program.

Please use the space below to describe how the intervention and any selected local quality measures to be addressed by the intervention align with community needs identified throughout the Community and Health Neighborhood Engagement process (including data identified in the hospital’s CHNE midpoint and final reports), including but not limited to:

- How the intervention and any selected local quality measures to be addressed by the intervention were selected based on identified community needs, including how they align with identified significant behavioral and physical health needs and / or service capacity resources and gaps, including related to care transitions and social determinants of health;
- How the population of focus aligns with identified community needs; and
- How the proposed intervention will leverage available medical and / or social resources and partners.

Response (Please seek to limit the response to 1,500 words or less)
- How the intervention and any selected local quality measures to be addressed by the intervention were selected based on identified community needs, including how they align with identified significant behavioral and physical health needs and / or service capacity resources and gaps, including related to care transitions and social determinants of health.
The intervention to educate providers and enhance quality monitoring, and the identified state and local quality measures were selected based on the feedback gleaned during the Community and Health Neighborhood Engagement (CHNE) process. While the most prominent needs identified by our partners and stakeholders were related to behavioral health, concern was also raised about the rates of overweight and obesity, as well as hypertension, all of which can be risk factors for stroke. Behavioral health concerns may also lead to increased risk for a stroke, such as certain types of substance use and depression. For example, depression could lead to a lack of motivation to attend medical appointments or adopt a healthy lifestyle with an adequate diet and regular physical exercise.

Capacity was another gap identified by our community. In the Denver metro area, there are about 83.3 primary care providers for every 100,000 residents, and anecdotally, our stakeholders report that PCPs are not always comfortable with taking care of more complex patients. Specialty care, although available, can also be challenging to access, with only an average of 342 specialists per 100,000 residents. Specialty care access is even more restricted for patients with Medicaid. Adding to the difficulty is finding appointments during evening and weekend hours for working patients or providers who speak the same language as the patient. Lack of access to follow-up care may delay initiation of therapy for stroke prevention and makes it even more important to prescribe a statin medication to a stroke patient at discharge from the hospital as providers cannot depend on a patient getting in to see a specialist or PCP in a timely manner. Some in the community felt that while there are many services available to assist with transitions of care from the acute setting to home care, skilled nursing facilities, or long-term acute care, the impression of the community is that these services are not collaborative and often cause confusion and less coordination. Additionally, home care, skilled nursing, and long-term acute care services are limited for patients with Medicaid.

Adding to the difficulty patients face is the overwhelming burden of social and economic needs. In the Denver area, about 25% of patients use more than half of their income to pay for rent, and about one-third live below 200% of the federal poverty level. These statistics indicate that individuals are having to choose between paying for housing or paying for their health care needs. Homelessness is a significant challenge reported in our communities, which can exacerbate medical conditions by exposure to elements and lack of dependable nutrition. Transportation can also be a challenge in the Denver area. Individuals without reliable transit options cannot consistently depend on convenient public transport, which makes attendance at appointments even more challenging.

- How the population of focus aligns with identified community needs.

The population of focus for this intervention will be patients diagnosed with ischemic stroke who were admitted to the hospital. The goal is to reduce stroke recurrence through the reduction of risk factors and avoid worsening disability in patients in our community due to secondary stroke. This will allow more patients to continue to live at home, remain socially active, and return to the work force, reducing the economic burden on families and communities. This scope aligns with our community’s needs, namely addressing risk factor modification. By addressing the prevention of recurrent stroke while the patient is still in the hospital through the prescription of statin medications, Castle Rock Adventist Hospital strives to address our community’s concern about problematic access to specialty care.

- How the proposed intervention will leverage available medical and / or social resources and partners.
This intervention proposes to use already existing resources available to Castle Rock Adventist Hospital. Centura’s neuro team or their designees will be responsible for leveraging clinical expertise across our connected ecosystem to update, test or review, and implement updated standardized stroke protocol. Additionally, our hospital already has an existing infrastructure through our Stroke Council which will oversee ongoing quality performance, review compliance efforts, and identify continued interventions when necessary for success.

5. Please identify the evidence base (academic, professional or otherwise) related to this intervention’s use among the target population by selecting one of the following options:

(1) Randomized Control Trial (RCT) level evidence
(2) Best practice supported by less than RCT evidence
(3) Emerging practice
(4) No evidence

If you selected option 1, 2 or 3 above, please use the space below to summarize the evidence base (academic, professional or otherwise) related to this intervention’s use among the target population. The response should address the intervention’s ability to impact the selected local and statewide quality measures identified in Question 6 in the Hospital Application. Please submit the response in narrative form and provide links to any reference documentation (data, citations, etc.).

If you selected option 4 indicating that there is no known evidence base, please explain why this intervention is being proposed regardless.

Response (Please seek to limit the response to 1,500 words or less)
(1) Randomized Control Trial (RCT) level evidence

The American Heart Association/American Stroke Association (AHA/ASA) (Powers et al., 2019) published comprehensive clinical guidelines for the management of patients with an acute ischemic stroke. Their section on in-hospital care and secondary stroke prevention explicitly addresses the use of statins to treat hyperlipidemia. This section reviews general principals, choosing the best statin for the patient with ASCVD, and other considerations. The use of statins is recommended by the AHA/ASA to lower LDL-C levels in conjunction with lifestyle changes such as a healthy diet and exercise after considering all factors, including the physical examination and lab results. This publication offers 22 recommendations related to statin medications. Of those 22, 12 are listed as Class I meaning the health benefits are higher than the associated risks and six are listed as Level A, meaning high-quality randomized control trials or meta-analyses of high-quality randomized control trials support the evidence. Micieli, Cavallini, and Quaglini (2002) studied compliance with a previous version of the AHA stroke guidelines in their GLADIS study of the Lombardia region in Italy. They found that compliance with these guidelines positively correlated with survival and treatment effectiveness and had a 15% decrease in mortality. Additionally, compliance with evidence-based guidelines has been shown in Italy to decrease the cost of care and length of stay (Quaglini, Cavallini, Gerzeli, and Micieli, 2004).

The use of statins to prevent recurrent ischemic stroke is well documented in peer-reviewed literature despite physician hesitation about the risks of statin medications. For example, the PROSPER study (O’Brien et al., 2015) looked at a total of 77,468 patients between 2007 and 2011 who were 65 years or older and were not taking a statin medication on admission when they had an ischemic stroke. Of these patients, 71% were sent home on a statin medication. This intervention was
associated with lower hazard scores for a major cardiovascular event, more days at home during a 2-year follow-up, lower mortality, and lower readmissions with no association for increased risk of hemorrhagic stroke. Amarenco and Labreuche (2009) conducted a meta-analysis of randomized control trials looking at statin interventions and other preventive measures and concluded that intensely reducing LDL with statins significantly reduces the risk of a second cardioembolic stroke. Tramacere et al. (2019) also conducted a meta-analysis of randomized control trials of statins for ischemic stroke or transient ischemic attack (TIA). They found that high dose statins had the most significant benefit and there was not much difference in outcome based on the choice of statin selected. Amarenco et al. (2009) tested the use of atorvastatin 80mg/day and found it was beneficial in the prevention of strokes and other cardiovascular events regardless of the initial ischemic stroke subtype. In a trial just published in the New England Journal of Medicine, Amarenco et al. (2020) found lower risk of recurrent cardiovascular events among patients with a history of TIA or acute ischemic stroke of atherosclerotic origin who had a targeted LDL level of less than 70 when compared to those with a higher targeted range.

Previous statin use can also be of benefit to patients. Fuentes, Martinez-Sanchez, and Diez-Tejedor (2009) completed a literature review looking at the effect of previous cholesterol-lowering medication use on stroke risk and found that while statins are good at lowering recurrent stroke risk, previous statin use is even better. Furthermore, they found that discontinuing statins should never happen as it dramatically decreases the benefits. Additionally, Lee et al. (2017) compared patients in Taiwan who discontinued their statin use between three and six months post-stroke and found that they had higher risk scores at one-year follow-up compared to those who maintained or even just reduced their statin use.

Despite the overwhelming evidence in favor of statin usage to prevent recurrent stroke, some physicians hesitate to prescribe the drugs. For example, in one study where the guidelines were digitized and entered into the electronic health record, physicians were still resistant to prescribe statins (Quaglini, Ciccarese, Micieli, and Cavallini, 2003). A degree of non-compliance with the guidelines could be reasoned, but some cases were based only on resistance to change and cultural biases. This study further assessed that non-compliance with guidelines equated to a 7% increase in mortality at six months, whereas those who were treated in accordance with the guidelines experienced 13% greater treatment effectiveness on discharge and lower costs of care. Hassan et al. (2016) conducted a study to observe patients admitted for acute ischemic stroke and compare the difference in care between four admitting groups: hospitalists, internists, family practice providers, and specialists. They discovered that hospitalists were the most likely of the four admitting groups to adhere to Get With The Guidelines recommendations for stroke patients and internists were the least likely. However, among all groups, about 56% did not prescribe statin medications on discharge.

Disparities in prescribing practices have been found based on patient sex, race, age, and region of the United States (Albright et al., 2017). For instance, in the “stroke belt” in the southeastern United States, patients 65 years and older are 47% less likely to be prescribed a statin on discharge than those younger than 65 years; this is not the case in other areas of the United States. Additionally, in the “stroke belt,” patients who are black and white are equally likely to be prescribed a statin, but outside of this region patients who are black are more likely to be prescribed a statin. Furthermore, men are less likely than women in this region to be prescribed a statin, whereas, outside this region, men are more likely than women to be prescribed a statin.

Patients themselves often choose to discontinue statin use for a variety of reasons. Factors that can help predict increased compliance with medications include older age, worse severity of stroke on
admission, and a cardioembolic cause (Sappok et al., 2001). Brookhart et al. (2007) looked at patients who were prescribed a statin and had a period of at least 90 days when their prescription went unfilled. Forty-eight percent restarted within one year and 60% restarted within two years. Visits with their doctors, cholesterol tests, and hospitalizations for cardiovascular disease-related conditions were all associated with restarting statin usage.

Statin usage has increased lately (Yang et al., 2019). Yang et al. found that in the year 2000, about 25% of the patients in their study were using statins at two years post-stroke, in 2006 that number jumped to 70% and was at about 75% through 2014. About 15% were on high-intensity statins from 2004-2011 and that increased to 35% in 2014. This study found that those less likely to receive statins include older patients (75 years or older), younger patients (less than 45 years), patients with no prior statin use, patients with dementia, patients who were underweight, and patients with an absence of cardiovascular risk factors.

Standardized quality improvement measures have been shown to increase compliance with this valuable recommendation. Stoeckle-Roberts et al. (2006) utilized the Paul Coverdell National Acute Stroke Registry used at 13 hospitals in Michigan to implement tailored stroke guidelines for the hospitals. They concluded that a systemic collaborative approach to quality improvement can be used to drive stroke care improvements by using a protocol, data collection, and monitoring, which are precisely the elements that Castle Rock Adventist Hospital plans to implement through this intervention. For example, Stoeckle-Roberts et al. found statistically significant improvement in compliance with five of the 16 guidelines including smoking cessation, screenings for dysphagia, usage of the NIH stroke scale, documentation of reasons for not using rt-PA, and documentation of dyslipidemia with this approach.

SOURCES:


6.
   a. Does the focus of the proposed intervention intersect with ongoing initiatives statewide (including, but not limited to those included in the ACC, State Innovation Model and Comprehensive Primary Care Plus)?
      □ Yes
      ☒ No

   b. If yes, please identify the applicable statewide initiative(s): (you may select more than one response from the list below)
      • Behavioral Health Task Force
      • Affordability Road Map
      • IT Road Map
      • HQIP
      • ACC
      • SIM Continuation
      • Rx Tool
      • Rural Support Fund
      • SUD Waiver
      • Health Care Workforce
      • Jail Diversion
      • Crisis Intervention
      • Primary Care Payment Reform
      • Other: ___ (please identify)

Please also use the space below to briefly explain how the hospital will ensure the intervention aligns with the applicable ongoing initiative(s).

Response (Please seek to limit the response to 750 words or less)
This intervention does not intersect with ongoing initiatives statewide.

7. Please use the space below to explain any experience the hospital or any affiliated community partners have had with this type of intervention or target population and how that experience will support the success of the intervention.

Response (Please seek to limit the response to 500 words or less)
Castle Rock Adventist Hospital has experience responding to and treating acute ischemic stroke. Importance is placed on discharging patients on statin medications as appropriate to reduce the risk...
of recurrent ischemic stroke. Currently, our eCQM rate for discharging patients on a statin medication is 92%.

Castle Rock Adventist Hospital is a Primary Stroke Center, certified by The Joint Commission in 2018. Castle Rock Adventist Hospital is committed to maintaining a stroke program that takes a best practice approach for stroke treatment through the continuum of care using a multidisciplinary model in order to reduce disability and death from stroke and to best meet the needs of our patients and community. Our program promotes and improves access to high quality stroke care for the community. We are committed to improve stroke prevention, treatment and rehabilitation through the development and implementation of evidence-based standards and guidelines of care.

Castle Rock Adventist Hospital has several policies in place for best practice stroke care including Stroke Alert Guidelines, Stroke Alert Flow Diagrams, Intravenous Alteplase for Acute Ischemic Stroke, and Castle Rock Scope of Service.

The Stroke Program Leadership Team participates in designing, implementing, and evaluating care, treatment, and services to support the performance of care, treatment and services according to evidence-based standards. The Stroke Medical Director assumes primary responsibility for the stroke program, in collaboration with the Stroke Committee. The Medical Director ensures the stroke program meets guidelines set forth by the American Heart Association, American Stroke Association, American Academy of Neurology, American Association of Neurosurgical Surgeons, and the Disease-Specific Certification programs specifications of the Joint Commission.

The Stroke Coordinator provides oversight and maintains stroke data collection for GWTG, stroke core measures, stroke alert log, treatment log and other metrics of program quality. Stroke metrics are reported to the Stroke Committee meetings and to the Quality and Patient Safety Committee on an annual basis.

Initiating a Stroke Alert expedites evaluation and treatment of acute stroke patients. Emergency Department Stroke alerts may be initiated in the field by emergency medical services or upon Emergency Department triage of the patient. In-hospital Stroke Alert activation are initiated by calling the operator to notify the in-hospital Rapid Response Stroke Alert Team. A Stroke Alert Guideline provides structure for processes. Stroke alert flow diagrams for both Inpatient and ED stroke alert processes are available for staff to reference to help expedite care of acute ischemic stroke patients.

In order to be successful with our proposed intervention we will draw on our existing experience and infrastructure to reach out to all providers with education on correct documentation for statin medications.

8.  
   a. Is this an existing intervention in use within the hospital (“existing interventions” are those interventions the hospital has implemented or is implementing on the day it submits the Hospital Application)?

     □ Yes
     ☒ No
b. If yes, please use the space below to explain how the following criteria for leveraging existing interventions is satisfied (the response may reference answers above):

- The hospital must demonstrate that the use of the existing intervention is the best approach for meeting the needs of the community identified during the Community and Health Neighborhood Engagement process.
- The hospital must demonstrate that the project will be enhanced to meet HTP goals.

Response (Please respond as applicable; Please seek to limit the response to 1,000 words or less)

This is not an already existing intervention used in our hospital; however, Castle Rock Adventist Hospital will be utilizing already existing resources to achieve the desired results described within this intervention. For example, the Centura neuro team will be updating, testing or reviewing, and implementing the standardized stroke protocol while our already existing Stroke Council will oversee progress and monitor statin prescription compliance.

9. a. Will the intervention be a joint effort with another organization (e.g., a Regional Accountable Entity, Local Public Health Agency, a mental or community health center, another community organization or any other external organization)?

☐ Yes  ☒ No

Partnerships are not required, but, if the hospital will partner, please complete the remainder of this question and provide the required documentation (see subpart c).

b. If yes, please complete the following chart, including listing the partner organization; listing the type of organization; indicating whether the hospital has previously partnered with the organization; and providing a high-level summary of the expected role of the organization in intervention’s leadership and implementation.

<table>
<thead>
<tr>
<th>Partner Organization Name</th>
<th>Type of Organization</th>
<th>Does the hospital have any previous experience partnering with this organization? (Yes or No)</th>
<th>Organization’s Role in Intervention Leadership and Implementation (high-level summary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Partnerships are not required, but, if the hospital will partner, please complete the remainder of this question and provide the required documentation (see subpart c).

9. c. Please also submit documentation of the partnership with each listed organization. Documentation may be provided separately for each organization listed above and could include: a contract; a memorandum of understanding; a business association agreement; a Letter of Partnership from the listed organization(s); or similar documentation. If a Letter of Partnership is provided, in it the organization should: (1) acknowledge that it intends to partner; (2) provide a brief description of the organization; (3) express agreement with the

The Colorado Healthcare Affordability and Sustainability Enterprise (CHASE) is a government-owned business within the Department of Health Care Policy and Financing. www.colorado.gov/hcpf
planned intervention; and (4) express agreement with the planned role it will have in leadership and implementation of the intervention as expressed above. The letter should be signed by a member of the organization’s management and submitted with this application in the same .pdf document. The Letter of Partnership Template can be found on the HTP webpage.
Hospital Transformation Program

Intervention Proposal

I. Background Information

This Intervention Proposal is designed to clearly articulate the scope and goals of proposed transformation interventions aimed at impacting the hospital’s selected local quality measures under the HTP. The following questions are meant to assist the state in identifying: the evidence base for each intervention; the need within targeted communities for the implementation of the interventions; and how the interventions will advance the goals of the HTP.

Hospitals will not be required to implement a specified number of interventions. Instead, participation requirements are based on the selection of local quality measures to impact within the five HTP Focus Areas:

- Reducing Avoidable Hospital Utilization
- Core Populations
- Behavioral Health and Substance Use Disorders
- Clinical and Operational Efficiencies
- Community Development Efforts to Address Population Health and Total Cost of Care

Hospitals will be required to address statewide measures for each Focus Area. Hospitals will also be required to select from the HTP list of local measures across the five Focus Areas based on community needs and the goals of the HTP. Each hospital will be required to work on a set of measures equal to 100 points. The number, mix and points per measure will vary according to hospital size, defined by bed count or specialty type:

- Large hospitals (91+ beds) will be accountable for six statewide measures, totaling 60 points and a minimum of four local measures, which will account for 40 points. Points per local measure will equal 40 divided by the number of local measures selected.
- Medium hospitals (26-90 beds) will be accountable for six statewide measures and a minimum of two local measures. If two local measures are selected, statewide measures will total 75 points, and local measures will account for 25 points. Points per local measure will equal 25 divided by the number of local measures selected. If three local measures are selected, then statewide measures will total 67 points and local measures will account for 33 points. Points per local measure will equal 33 divided by the number of local measures selected. If four or more local measures are selected, then statewide measures will then total 60 points and local measures will account for 40 points. Points per local measure will equal 40 divided by the number of local measures selected for four or more local measures.
- Small hospitals (<26 beds) excluding critical access hospitals will be accountable for six measures (statewide or local) to account for 100 points. Points per each measure will equal 100 divided by the number of measures selected.
- Critical access hospitals will be accountable for six measures (statewide or local) and will have their risk for measures reduced by 40%.
• Pediatric hospitals will be accountable for five statewide measures, totaling 50 points and a minimum of five local measures, which will account for 50 points. Points per local measure will equal 50 divided by the number of local measures selected.
• Respiratory specialty hospital(s) will be accountable for four statewide measures and a minimum of four local measures. If four measures are selected then statewide measures will total 56 points and local measures will account for 44 points. Points per local measure will equal 44 divided by the number of local measures selected. If five or more measures are selected, then statewide measures will total 50 points and local measures will total 50 points. Points per local measure will equal 50 divided by the number of local measures selected.

Hospitals have the option to work on local measures beyond the required minimum. This would spread the local measure risk by reducing the points per local measure.

In addition, hospitals have the option to replace a local measure with a statewide priority. Each statewide priority will be worth 20 points and if selected the points for each remaining local measure will be equal to the remaining total required local measure points divided by the number of local measures, greatly reducing the risk associated with those measures.

Hospitals should consult the Measure Scoring Summary, which can be found on the HTP webpage, for more information about measure selection, requirements and scoring.

Hospitals must then design five-year interventions that will impact their selected quality measures.

Hospitals must demonstrate that their proposed interventions will fulfill the goals of the HTP and are evidence-based. They must also justify the selection of each intervention based on the findings of the Community and Health Neighborhood Engagement process, including the environmental scan and feedback.

Each hospital will need to report its own data and submit its own application, but partnerships between hospitals may occur in some instances.

Hospitals may leverage existing resources for interventions, and existing interventions may be considered insofar as they expand or enhance the Department’s noted goals and meet the following criteria:
• The hospital must demonstrate that the existing intervention is being selected because it is the best approach for meeting the needs of the community identified during the Community and Health Neighborhood Engagement process.
• The hospital must demonstrate that the intervention can and will be enhanced to meet HTP goals.

In addition to meeting the above criteria, any hospital proposing existing interventions for participation in the HTP will be expected to propose and implement accelerated milestones in the Implementation Plan for such interventions.

This Intervention Proposal must be completed separately for each of the interventions being proposed for inclusion in the HTP. Hospitals must submit interventions that, together, address all of the statewide quality measures and the local quality measures listed in the hospital’s response to Question 6 in the Hospital Application.
II. Overview of Intervention

1. Name of Intervention: Edinburgh Depression Scale screening

2. Please use the table below to identify which statewide and selected local quality measures (from the hospital’s response to Question 6 in the Hospital Application) the hospital will address through this intervention. As a reminder, each of the statewide and selected local quality measures must be identified for at least one intervention. As such, if this is the only intervention addressing a given Focus Area, all statewide quality measures and all selected local quality measures for that Focus Area must be included in this response. This response should align with the intervention-specific list included in the response to Question 7 in the Hospital Application.

Please note, hospitals are also required to complete the Intervention Proposal below for statewide priorities identified in Question 6 of the HTP Hospital Application.

Please use the unique identification code from the Performance Measures List (which is available on the HTP website) to identify your selected measures. For example, the measure “30 Day All Cause Risk Adjusted Hospital Readmission” should be listed as SW-RAH1.

Response (Please format the response as a numbered list)

1. CP6
2. SW-BH1

3. Please use the space below to describe the intervention and the rationale for its selection.

Responses should include:

- A description of the intervention; and
- How the intervention advances the goals of the HTP.

Response (Please seek to limit the response to 1,000 words or less)

- A description of the intervention.

All perinatal and post-partum women will be screened for depression and anxiety at any hospital encounter using the Edinburgh Depression Scale. The Edinburgh Depression Scale (EDS) is a validated and highly-reliable screening tool tailored to pregnant and post-partum women. The tool was initially created to detect post-partum depression (PPD) but can also be used to identify anxiety. Validated depression screening tools can save providers time, allocate resources appropriately, minimize stigma, and engage patients proactively in the identification of their symptoms of depression for treatment response. By proactively assessing all perinatal and post-partum women for depression using the EDS at any encounter, Castle Rock Adventist Hospital will be able to identify an increasing number of patients experiencing mental illness and, in turn, appropriately refer them for follow-up specialized care, reduce the potential for readmission due to unmet behavioral health needs, and decrease avoidable costs.

The EDS screening questionnaire will be embedded in all care modules in Epic, Castle Rock Adventist Hospital’s electronic health record, for efficiency, consistency, and data collection. Currently, the EDS screening is administered via paper only within the Labor and Delivery unit with the score being transcribed into Epic; this human-dependent process will need to be improved for ease of screening hospital-wide. All women who screen positive for depression and who are Medicaid beneficiaries will
be referred to their RAE for follow-up care. For Castle Rock Adventist Hospital, that is considered an EDS score of greater than or equal to 10 or if the patient answers anything other than “never” on the final assessment question.

Several opportunities have been identified to implement this intervention and create a more reliable process. Within this intervention, Centura will explore the following opportunities:

- Identify hospital-wide guidelines for administration of the screening tool and appropriate steps to take, similar to the existing Labor and Delivery unit guidelines.
- Explore options to transition from a human-dependent process of completing a paper questionnaire to a highly reliable forcing function through our electronic health record.
- Create a visual management process to flag/notify the care team of a pregnant or post-partum patient. If we are to successfully screen all pregnant and post-partum women on any hospital encounter, including the ED or other inpatient floors, we will need a manner of identification to make sure we do not miss any eligible patients.
- Expand the Edinburgh Depression Scale outside of the Labor and Delivery unit to reach all potential patients who could benefit from depression and anxiety screening.
- Cascade standardized clinical education to all staff outside of the Labor and Delivery unit regarding how to administer the EDS assessment and actions needed to support a successful transition to RAE follow-up care. We will also need to cascade standardized clinical education to Labor and Delivery unit staff to begin administering the EDS to pregnant women as opposed to only women who have delivered, as is their current practice.
- Ensure the EDS is available in different languages as appropriate for our patient population.
- Identify referral and treatment resources for women with positive screens.

These details will be finalized and described in more detail in our implementation plan, along with a schedule of completion for our milestones.

- How the intervention advances the goals of the HTP.

This one EDS intervention advances all five overarching goals of the HTP.

1. First, it will improve patient outcomes by screening and identifying prenatal and post-partum women at any hospital encounter who are dealing with potentially severe depression and/or anxiety disorders. Currently, only women who have an encounter on the Labor and Delivery unit are being screened with this tool. Increasing our requirement to all perinatal and post-partum women at any encounter will allow our hospital to proactively identify additional patients who might have been missed and who can then be provided with the necessary follow-up assistance.

2. Second, improved performance of the delivery system will be achieved by ensuring that appropriate care is delivered in the appropriate clinical setting. Since many individuals with behavioral health concerns have contact with a medical professional, hospitals are poised to be key identifiers of behavioral health concerns and a seamless connection to the appropriate next-level providers. Those perinatal and post-partum patients who screen positive on the EDS will be referred.
to their appropriate Regional Accountable Entity (RAE). Once notified, the RAE can then offer the appropriate outpatient services to best meet the patients’ needs.

3. Third, the EDS intervention will help lower Health First Colorado costs by detecting behavioral health disorders earlier, ideally before progressing along the depression spectrum and, most importantly, before the patient and baby are severely impacted. The cost will also decrease due to the correct managing of the positively screened patient with the appropriate resources within the appropriate care location.

4. Fourth, implementing the EDS across every encounter will accelerate our readiness for value-based payment by ensuring that we pivot to a proactive approach of identifying members of vulnerable populations with potentially severe behavioral health disorders and referring them for appropriate treatment.

5. Finally, this EDS intervention will create standardization in the notification process and improve communication across the continuum of care. This improved communication will also increase collaboration between our hospital and the RAE, which will support the follow-up care after referral.

4. Please use the space below to describe how the intervention and any selected local quality measures to be addressed by the intervention align with community needs identified throughout the Community and Health Neighborhood Engagement process (including data identified in the hospital’s CHNE midpoint and final reports), including but not limited to:

- How the intervention and any selected local quality measures to be addressed by the intervention were selected based on identified community needs, including how they align with identified significant behavioral and physical health needs and / or service capacity resources and gaps, including related to care transitions and social determinants of health;
- How the population of focus aligns with identified community needs; and
- How the proposed intervention will leverage available medical and / or social resources and partners.

Response (Please seek to limit the response to 1,500 words or less)

- How the intervention and any selected local quality measures to be addressed by the intervention were selected based on identified community needs, including how they align with identified significant behavioral and physical health needs and / or service capacity resources and gaps, including related to care transitions and social determinants of health.

The EDS intervention and the measures impacted by implementation align with the community needs that were identified during our Community and Health Neighborhood Engagement (CHNE) process. Our community was especially concerned for mothers with behavioral health needs, including pregnant and postpartum women included in the scope of this intervention. Hospitals are seen as having a unique role in the life of pregnant and postpartum women. They are a trusted partner during this vulnerable phase of life, which presents opportunities to both identify individuals struggling with depression and anxiety and to connect those individuals to necessary resources to ensure wellbeing.

Behavioral health was the highest priority concern for our community. The feedback we received specifically called out concerns regarding undiagnosed or underdiagnosed behavioral health
conditions with particular concern for the negative impact maternal and perinatal depression can potentially have on women and birth outcomes. In the Denver area, about one in 10 women report perinatal depression symptoms after their new baby is born and 68.9% experience some kind of significant life stressor in the 12 months prior to delivery. Additionally, about 30% of maternal mortality deaths are due to self-harm either by a drug overdose or suicide. Behavioral illness can also interfere with physical health as individuals with behavioral health concerns are more likely to have a co-occurring physical health need and less likely to adhere to treatment recommendations.

The capacity for caring for behavioral health patients, both proactively and through treatment, is knowingly lacking in the Denver area. When access is expanded, the care delivery model is quickly taxed again and capacity is maxed out. Community partners report that the area may have an adequate number of service providers. Still, service providers can be challenging to get to because of transportation problems or other social needs that hinder a patient’s access. Further compounding the problem is the lack of availability of culturally appropriate service providers who speak the language of the patient or understand the patient’s background and culture norms influencing their decisions.

There is an understanding in the Denver area that many pregnant women do not get the prenatal care they need, especially working moms who have difficulty accessing care and require evening or weekend appointments. Social supports for new moms such as breastfeeding support groups or other educational groups could be one way to check in on a new mother’s mental wellbeing.

Compounding the concerns of maternal mental health are several social needs that hinder access to services or exacerbate poor mental health. The Denver area has very high disparities in income with extremely high housing costs. A lack of stable, affordable housing could increase the amount of stress on a new mom who might focus on ensuring her children have a home to live in instead of addressing her own depression. Transportation is another social determinant that could make it difficult to get to appointments, especially if public transportation does not go to convenient locations.

- How the population of focus aligns with identified community needs.

Our population of focus for this intervention is pregnant and postpartum women who receive Medicaid. This intervention aligns with our community’s concern for the physical and mental wellbeing of mothers while also acknowledging the unique position our hospital is in to serve pregnant and postpartum women through early identification of depression and anxiety. By focusing on pregnant and postpartum women, we will be able to influence outcomes for a particular, vulnerable population in our community and achieve our HTP goals.

- How the proposed intervention will leverage available medical and / or social resources and partners.

Our proposed intervention will leverage and strengthen a crucial community resource: our relationship with the RAE. The RAE is the expert on Medicaid resources and connects patients to additional support that will aid in their overall wellbeing. The RAE has knowledge and access to far more community resources than our hospital-based case management team. With proper notification and screening, the RAE will be able to find appropriate providers who accept Medicaid and have available appointments for follow-up care. Furthermore, we could see an increase in the number of referrals to the Nurse-Family Partnership for first-time mothers through the implementation of the
EDS intervention. The Nurse-Family Partnership is an evidence-based program that addresses various aspects of parenting, including screens for mental health. Additionally, if the patients see a CHPG provider, their provider will have access to their records in Epic and could follow-up at subsequent visits after delivery.

Castle Rock Adventist Hospital has a post-partum depression support group held at the hospital weekly. Patients are referred for a 4-week series from their provider or they can self-refer.

5. Please identify the evidence base (academic, professional or otherwise) related to this intervention’s use among the target population by selecting one of the following options:

(1) Randomized Control Trial (RCT) level evidence
(2) Best practice supported by less than RCT evidence
(3) Emerging practice
(4) No evidence

If you selected option 1, 2 or 3 above, please use the space below to summarize the evidence base (academic, professional or otherwise) related to this intervention’s use among the target population. The response should address the intervention’s ability to impact the selected local and statewide quality measures identified in Question 6 in the Hospital Application. Please submit the response in narrative form and provide links to any reference documentation (data, citations, etc.).

If you selected option 4 indicating that there is no known evidence base, please explain why this intervention is being proposed regardless.

Response (Please seek to limit the response to 1,500 words or less)

(1) Randomized Control Trial (RCT) level evidence

A systematic review of both academic and professional studies offers supporting evidence for this intervention to proactively screen for depression. The Edinburgh Postnatal Depression Scale (EPDS) is the most widely used screening questionnaire for PPD (Boyd et al., 2005). The EPDS was first devised in the 1980s and found to be a quick, simple measure of post-partum depression with satisfactory sensitivity, specificity, and validity (Cox, Holden, and Sagovsky, 1987). Further, a randomized controlled trial showed that the use of the EPDS combined with follow-up care was beneficial for improving mental health at a six-month follow-up for a group of post-partum women (Leung et al., 2011). While originally formulated to screen for depression in post-partum women, Bergink et. al. (2011) found that the scale could also reliably screen for ante-partum depression and be used during all three trimesters of pregnancy. Bergink et al., however, recommended a lower cut-off score be used for ante-partum depression than for post-partum depression and recommends a cut-off score of 11 in the first trimester and 10 in the second and third trimesters. The authors recommend calling the scale the Edinburgh Depression Scale in the context of administration with pregnant women. It has also been recommended that women be screened prenatally for depression and anxiety as a form of early detection of distress to prevent more serious post-partum depression issues (Khanlari et al., 2019). As measure CP6 is also interested in measuring anxiety, it is imperative to note that this tool has also been found to have an anxiety sub-scale. Tuohy and McVey (2008) highlighted that there are three questions that specifically address symptoms of anxiety which is sufficient evidence to use the tool for that purpose.
The American College of Obstetricians and Gynecologists (2018) recommend that obstetricians and gynecologists screen patients at least once during the prenatal period and then again during the postpartum visit. They list the EPDS as one popular option as a validated tool that would be useful for accomplishing this recommendation. They opine that the EPDS is helpful as it excludes symptoms of depression such as sleeping pattern changes as those are often found in pregnant women regardless of whether they have depression. In contrast, other depression scales would include these symptoms, thereby falsely inflating the results.

**SOURCES:**


6.

a. Does the focus of the proposed intervention intersect with ongoing initiatives statewide (including, but not limited to those included in the ACC, State Innovation Model and Comprehensive Primary Care Plus)?

- [ ] Yes
- [ ] No
b. If yes, please identify the applicable statewide initiative(s): (you may select more than one response from the list below)

- Behavioral Health Task Force
- Affordability Road Map
- IT Road Map
- HQIP
- ACC
- SIM Continuation
- Rx Tool
- Rural Support Fund
- SUD Waiver
- Health Care Workforce
- Jail Diversion
- Crisis Intervention
- Primary Care Payment Reform
- Other: ___ (please identify)

Please also use the space below to briefly explain how the hospital will ensure the intervention aligns with the applicable ongoing initiative(s).

Response (Please seek to limit the response to 750 words or less)
Behavioral Health Task Force, IT Road Map, HQIP, ACC, Crisis Intervention

This Edinburgh Depression Scale screening intervention aligns with the intentions of the state’s Behavioral Health Task Force, the IT Road Map, the Accountable Care Collaborative model, the statewide crisis intervention efforts, and HQIP.

By collaboratively screening for depression and anxiety in pregnant and postpartum women, we plan to align with the Behavioral Health Task Force’s safety net subcommittee intent of ensuring access to behavioral health care for all Coloradans regardless of situation. Our goal is to make sure that all patients who screen positive have a plan or resources available to support whole person health, whether that be physical or behavioral.

We intend to align with the IT Road Map by seeking an IT solution to refer all positively screened patients to the RAE. Such automated screening will not only increase efficiency in the health care system, but also provide opportunities for improved care coordination. The RAE will be notified of every one of their members who screens positive and be able to respond as appropriate. Such collaboration with the RAE will allow for high-performing, cost-effective solutions to complex, high needs situations while also serving to improve both member and provider experience. We will also explore options to encourage patient use of statewide crisis intervention resources through education on walk-in centers, crisis lines, and other options.

Additionally, this aligns well with HQIP efforts to address maternal health and perinatal care. HQIP has a measure regarding perinatal depression and anxiety and this intervention will help Centura comply with those requirements.
7. Please use the space below to explain any experience the hospital or any affiliated community partners have had with this type of intervention or target population and how that experience will support the success of the intervention.

Response (Please seek to limit the response to 500 words or less)
Castle Rock Adventist Hospital is currently using the Edinburgh Depression Scale to screen for depression and anxiety in women in our Labor and Delivery unit. In early 2020 we rolled out standardized guidelines for screening and notification to a provider for positive screens as a way to support our patients, provide educational materials, and support staff in their care of our patients. Any patient with a score of greater than or equal to 10 or who answers anything other than “never” on the final question is considered to have a positive screen and the provider is notified. If the score is greater than or equal to 20 or the patient answers anything other than “never” on the final question, the provider is required to see the patient prior to discharge and follow-up interventions may be requested such as a case management consult or psychological evaluation.

Lessons learned from this experience will inform our successful implementation of the EDS intervention across all units of the hospital. We will use a standardized performance improvement strategy following Lean principles from now through program year three to influence our successful implementation and course correct for any deviations or discrepancies when appropriate. Such a proactive approach to rapid cycle improvement will allow for us to be fully prepared to successfully implement our intervention.

8.
   a. Is this an existing intervention in use within the hospital (“existing interventions” are those interventions the hospital has implemented or is implementing on the day it submits the Hospital Application)?
      ☑ Yes
      ☐ No
   
   b. If yes, please use the space below to explain how the following criteria for leveraging existing interventions is satisfied (the response may reference answers above):
      - The hospital must demonstrate that the use of the existing intervention is the best approach for meeting the needs of the community identified during the Community and Health Neighborhood Engagement process.
      - The hospital must demonstrate that the project will be enhanced to meet HTP goals.

Response (Please respond as applicable; Please seek to limit the response to 1,000 words or less)
The EDS will be an existing approach for Castle Rock Adventist Hospital as the Edinburgh Depression Scale is currently being used on our Labor and Delivery unit, but not yet hospital-wide. As described above in section 5.b., this tool is evidence-based and has been proven both valid and reliable for identifying pregnant and postpartum women struggling with depression and/or anxiety. Our community was very clear with us that their most significant priority was addressing behavioral health, specifically the behavioral health needs of pregnant and postpartum women. While the Edinburgh Depression Scale does not address all aspects of behavioral health, it does identify depression and anxiety, which are two of the most common behavioral health concerns among this population.
This EDS intervention will be enhanced for the purposes of the Hospital Transformation Program and achieving our quality measure goals. The specific milestones will be finalized and outlined in greater detail in our implementation plan, but several opportunities have been identified already. For example, we will need to find a way to visually identify women who are pregnant or postpartum in our Electronic Health Record. This visual flagging will notify care providers that their patient requires EDS screening. While the use of the EDS tool is standard on the Labor and Delivery unit today, where every patient is pregnant or postpartum, it will be less apparent to staff in other departments, like the ED, where postpartum screening is not a priority intervention if the patient comes in for an unrelated complaint. Identification of the appropriate patients will ensure that we are consistent in our approach to provide this evidence-based assessment intervention and notification throughout all our hospital departments. Another forcing function required within our EHR will be opening up the EDS assessment in all EPIC modules, not just on the Labor and Delivery unit. This new required intervention will allow all nurses in each care area to document a depression score no matter what the clinical condition the patient presented with. Standardized education will be created and cascaded across our connected ecosystem to support competency development, proper use of the new assessment tool, shared expectations for notification, and required follow-up if positively screened. Lastly, system-wide data tracking through standardized dashboards and progress reports will be created to monitor our progress and identify in real-time where improvements need to occur.

9. a. Will the intervention be a joint effort with another organization (e.g., a Regional Accountable Entity, Local Public Health Agency, a mental or community health center, another community organization or any other external organization)?
   - Yes
   - No

Partnerships are not required, but, if the hospital will partner, please complete the remainder of this question and provide the required documentation (see subpart c).

b. If yes, please complete the following chart, including listing the partner organization; listing the type of organization; indicating whether the hospital has previously partnered with the organization; and providing a high-level summary of the expected role of the organization in intervention’s leadership and implementation.

<table>
<thead>
<tr>
<th>Partner Organization Name</th>
<th>Type of Organization</th>
<th>Does the hospital have any previous experience partnering with this organization? (Yes or No)</th>
<th>Organization’s Role in Intervention Leadership and Implementation (high-level summary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
c. Please also submit documentation of the partnership with each listed organization. Documentation may be provided separately for each organization listed above and could include: a contract; a memorandum of understanding; a business association agreement; a Letter of Partnership from the listed organization(s); or similar documentation. If a Letter of Partnership is provided, in it the organization should: (1) acknowledge that it intends to partner; (2) provide a brief description of the organization; (3) express agreement with the planned intervention; and (4) express agreement with the planned role it will have in leadership and implementation of the intervention as expressed above. The letter should be signed by a member of the organization’s management and submitted with this application in the same .pdf document. The Letter of Partnership Template can be found on the HTP webpage.
Hospital Transformation Program

Intervention Proposal

I. Background Information

This Intervention Proposal is designed to clearly articulate the scope and goals of proposed transformation interventions aimed at impacting the hospital’s selected local quality measures under the HTP. The following questions are meant to assist the state in identifying: the evidence base for each intervention; the need within targeted communities for the implementation of the interventions; and how the interventions will advance the goals of the HTP.

Hospitals will not be required to implement a specified number of interventions. Instead, participation requirements are based on the selection of local quality measures to impact within the five HTP Focus Areas:

- Reducing Avoidable Hospital Utilization
- Core Populations
- Behavioral Health and Substance Use Disorders
- Clinical and Operational Efficiencies
- Community Development Efforts to Address Population Health and Total Cost of Care

Hospitals will be required to address statewide measures for each Focus Area. Hospitals will also be required to select from the HTP list of local measures across the five Focus Areas based on community needs and the goals of the HTP. Each hospital will be required to work on a set of measures equal to 100 points. The number, mix and points per measure will vary according to hospital size, defined by bed count or specialty type:

- Large hospitals (91+ beds) will be accountable for six statewide measures, totaling 60 points and a minimum of four local measures, which will account for 40 points. Points per local measure will equal 40 divided by the number of local measures selected.
- Medium hospitals (26-90 beds) will be accountable for six statewide measures and a minimum of two local measures. If two local measures are selected, statewide measures will total 75 points, and local measures will account for 25 points. Points per local measure will equal 25 divided by the number of local measures selected. If three local measures are selected, then statewide measures will total 67 points and local measures will account for 33 points. Points per local measure will equal 33 divided by the number of local measures selected. If four or more local measures are selected, then statewide measures will then total 60 points and local measures will account for 40 points. Points per local measure will equal 40 divided by the number of local measures selected for four or more local measures.
- Small hospitals (<26 beds) excluding critical access hospitals will be accountable for six measures (statewide or local) to account for 100 points. Points per each measure will equal 100 divided by the number of measures selected.
- Critical access hospitals will be accountable for six measures (statewide or local) and will have their risk for measures reduced by 40%.
Pediatric hospitals will be accountable for five statewide measures, totaling 50 points and a minimum of five local measures, which will account for 50 points. Points per local measure will equal 50 divided by the number of local measures selected.

Respiratory specialty hospital(s) will be accountable for four statewide measures and a minimum of four local measures. If four measures are selected then statewide measures will total 56 points and local measures will account for 44 points. Points per local measure will equal 44 divided by the number of local measures selected. If five or more measures are selected, then statewide measures will total 50 points and local measures will total 50 points. Points per local measure will equal 50 divided by the number of local measures selected.

Hospitals have the option to work on local measures beyond the required minimum. This would spread the local measure risk by reducing the points per local measure.

In addition, hospitals have the option to replace a local measure with a statewide priority. Each statewide priority will be worth 20 points and if selected the points for each remaining local measure will be equal to the remaining total required local measure points divided by the number of local measures, greatly reducing the risk associated with those measures.

Hospitals should consult the Measure Scoring Summary, which can be found on the HTP webpage, for more information about measure selection, requirements and scoring.

Hospitals must then design five-year interventions that will impact their selected quality measures.

Hospitals must demonstrate that their proposed interventions will fulfill the goals of the HTP and are evidence-based. They must also justify the selection of each intervention based on the findings of the Community and Health Neighborhood Engagement process, including the environmental scan and feedback.

Each hospital will need to report its own data and submit its own application, but partnerships between hospitals may occur in some instances.

Hospitals may leverage existing resources for interventions, and existing interventions may be considered insofar as they expand or enhance the Department’s noted goals and meet the following criteria:

- The hospital must demonstrate that the existing intervention is being selected because it is the best approach for meeting the needs of the community identified during the Community and Health Neighborhood Engagement process.
- The hospital must demonstrate that the intervention can and will be enhanced to meet HTP goals.

In addition to meeting the above criteria, any hospital proposing existing interventions for participation in the HTP will be expected to propose and implement accelerated milestones in the Implementation Plan for such interventions.

This Intervention Proposal must be completed separately for each of the interventions being proposed for inclusion in the HTP. Hospitals must submit interventions that, together, address all of the statewide quality measures and the local quality measures listed in the hospital’s response to Question 6 in the Hospital Application.
II. Overview of Intervention

1. Name of Intervention: Implement standardized MAT program in the ED

2. Please use the table below to identify which statewide and selected local quality measures (from the hospital’s response to Question 6 in the Hospital Application) the hospital will address through this intervention. As a reminder, each of the statewide and selected local quality measures must be identified for at least one intervention. As such, if this is the only intervention addressing a given Focus Area, all statewide quality measures and all selected local quality measures for that Focus Area must be included in this response. This response should align with the intervention-specific list included in the response to Question 7 in the Hospital Application.

Please note, hospitals are also required to complete the Intervention Proposal below for statewide priorities identified in Question 6 of the HTP Hospital Application.

Please use the unique identification code from the Performance Measures List (which is available on the HTP website) to identify your selected measures. For example, the measure “30 Day All Cause Risk Adjusted Hospital Readmission” should be listed as SW-RAH1.

Response (Please format the response as a numbered list)

1. BH2
2. SW-BH1
3. SW-BH3

3. Please use the space below to describe the intervention and the rationale for its selection.

   Responses should include:
   - A description of the intervention; and
   - How the intervention advances the goals of the HTP.

Response (Please seek to limit the response to 1,000 words or less)

- A description of the intervention.

In order to address our community’s needs and better serve patients appropriate for medication assisted treatment intervention, Castle Rock Adventist Hospital plans to implement a program to induce emergency department (ED) patients on medication assisted treatment (MAT) for inappropriate opioid use and refer them to a community provider for ongoing treatment. The program will, to the extent possible, follow the recommended practice guidelines established by entities such as the Colorado ACEP (American College of Emergency Physicians) chapter and implemented in our sister hospital, St. Anthony North Health Campus. As amenable, ED patients will be screened during triage by nursing staff for inappropriate opioid use. Those identified through this screening as potentially abusing opioids will be approached to further screen their appropriateness for induction on MAT. Screening may include a measurement of the patient’s withdrawal severity. The ED provider will make the ultimate decision on whether to administer medication to the patient, appropriate dosage, and be monitored for response to the treatment. All patients induced on MAT in the ED will be referred for ongoing treatment with a community-based provider.

Several needs have been identified for the purposes of this intervention:
• Castle Rock Adventist Hospital will have to identify a role to complete this work with the patient and then train that role on all the various steps and assessments involved.

• A workflow will need to be created and approved by ED staff for the implementation of this program and all ED caretakers will need to be informed of the new workflow and screening questions.

• ED providers will need to be educated on the administration of the medication.

• Partnerships and processes for referrals to community MAT providers will need to be established.

• Medication will need to be stocked by the pharmacy.

• Standardized reporting tools and dashboards will need to be created as needed to track our progress.

These needs will be finalized and addressed in more detail in the implementation plan.

• How the intervention advances the goals of the HTP.

This ED MAT program intervention advances all five of the HTP goals.

1. First, it will improve patient outcomes through care redesign and integration of care across settings. By creating a new process for the treatment of opioid withdrawal and opioid use disorder, we will have an additional option to treat the underlying cause as opposed to just treating the symptoms. This program will allow us to seamlessly refer patients to ongoing addiction treatment straight from the ED, which will offer patients long-term solutions for their presenting complaints.

2. Second, we will improve the patient experience in the delivery system by ensuring appropriate care in appropriate settings. By treating the addiction instead of providing only symptomatic relief and referring to outpatient care providers, patients will receive the necessary treatment for addiction in the setting that is most qualified to treat their needs.

3. Next, we plan to lower Health First Colorado costs through reductions in avoidable hospital utilization and increased effectiveness and efficiency in care delivery. Studies (detailed below) have shown that a program such as this can help reduce ED readmissions. By meeting patients’ needs in the outpatient care setting, we are working to interrupt the cycle of use and withdrawal and decrease the need for expensive ED care. Reduction in the illicit use of opioids also comes with a reduction in the physical health complications that might accompany it, further reducing the burden on the healthcare system.

4. Additionally, this intervention will accelerate our readiness for value-based payments. We will be focusing on patient outcomes by treating the cause instead of just treating symptomatically.

5. Finally, we will increase collaboration with community resources who choose to partner with us for ongoing long-term treatment of patients suffering from inappropriate opioid use.
4. Please use the space below to describe how the intervention and any selected local quality measures to be addressed by the intervention align with community needs identified throughout the Community and Health Neighborhood Engagement process (including data identified in the hospital’s CHNE midpoint and final reports), including but not limited to:

- How the intervention and any selected local quality measures to be addressed by the intervention were selected based on identified community needs, including how they align with identified significant behavioral and physical health needs and / or service capacity resources and gaps, including related to care transitions and social determinants of health;
- How the population of focus aligns with identified community needs; and
- How the proposed intervention will leverage available medical and / or social resources and partners.

Response (Please seek to limit the response to 1,500 words or less)

- How the intervention and any selected local quality measures to be addressed by the intervention were selected based on identified community needs, including how they align with identified significant behavioral and physical health needs and / or service capacity resources and gaps, including related to care transitions and social determinants of health;

The intervention and the selected measures impacted by implementation align with the community needs that were identified during our Community and Health Neighborhood Engagement (CHNE) process. Our community’s most significant priority is behavioral health, including both mental health and substance use disorders. Stakeholders to our CHNE were acutely concerned by their understanding that many in the Denver area suffer from undiagnosed or underdiagnosed behavioral health conditions leading to an overwhelmed acute care system that is taxed by individuals seeking emergency care during a mental health crisis or acute intoxication.

Another related concern is those suffering from co-occurring behavioral and physical conditions. Behavioral illness tends to complicate physical health and vice versa. Additionally, many mental health conditions include symptoms such as lack of motivation and apathy, or severely impact functioning such that it is difficult for a patient to attend healthcare appointments or meet their basic needs. Only about 0.7% of care-seeking adults in the Denver area have been diagnosed with Opioid Use Disorder, but it is a significant driver in emergency department visits.

Compounding the concerns of behavioral illnesses are several social needs that hinder access to services or exacerbate poor mental health and the severity of substance use disorders. The Denver area has very high disparities in income with extremely high housing costs. About 25% of area residents use more than half of their income to pay for rent, and about one-third live below 200% of the federal poverty level. A lack of stable, affordable housing could increase the amount of stress on an already unwell individual who might be forced to choose between finding housing and addressing their behavioral health needs. Homelessness is a significant challenge reported in our communities, which can exacerbate health conditions by exposure to elements, lack of dependable nutrition, and undue stress. Transportation is another social need that could make it challenging to get to appointments, especially if public transportation does not go to convenient locations. Lastly, those with behavioral health needs may have a more difficult time finding and keeping employment, which could lead to a lack of stable income.

The capacity for caring for behavioral health patients, both proactively and through treatment, is knowingly lacking in the Denver area. When access is expanded, the care delivery model is quickly
taxed again, and capacity is maxed out. There are about 83.3 PCPs per 100,000 residents and 164 nurse practitioners or physician assistants per 100,000 residents, but they are not always comfortable taking more complex patients. The Denver area has about 432 behavioral health specialists per 100,000 residents and only 12.8 certified addictions counselors per 100,000 residents, and even fewer accept Medicaid. Specific licensure must be obtained for providers to prescribe MAT. In 2017, Colorado had 702 health care professionals authorized to prescribe buprenorphine, but 46% did not prescribe the medicine between 2016 and 2017. Additionally, service providers can be challenging to get to because of transportation problems or other social needs that hinder a patient’s access. Further compounding the problem is the lack of availability of culturally appropriate service providers who speak the language of the patient or understand the patient’s background and cultural norms influencing their decisions.

• How the population of focus aligns with identified community needs.

The population of focus for this intervention will be all ED patients struggling with inappropriate opioid use as identified through screening and assessment. This intervention is in alignment with our community’s priority concern of behavioral health. Our community repeatedly told us that behavioral health needs are the most pressing health concern facing our patients, especially for Medicaid patients who have fewer resources to access. We hope to address behavioral health needs by utilizing medication to treat inappropriate opioid usage among patients in our EDs as opposed to the status quo of symptomatically treating opioid withdrawal. Referring to outpatient MAT providers will help ensure that the patient does not fall through the cracks and has the appropriate supports in place to assist with recovery.

• How the proposed intervention will leverage available medical and / or social resources and partners.

Our proposed intervention will leverage previous experience at our sister hospital, St. Anthony North Health Campus, which began an ED MAT program in 2018. We plan to draw from their experience as well as the experience of their ED Medical Director, Dr. Christopher Johnston, who contributed to the CO ACEP guidelines on ALTOs and MAT in the ED setting. Also, we plan to partner with existing community MAT treatment providers. We will work with them to set up a referral process for patients who are induced on MAT in our ED.

5. Please identify the evidence base (academic, professional or otherwise) related to this intervention’s use among the target population by selecting one of the following options:

(1) Randomized Control Trial (RCT) level evidence
(2) Best practice supported by less than RCT evidence
(3) Emerging practice
(4) No evidence

If you selected option 1, 2 or 3 above, please use the space below to summarize the evidence base (academic, professional or otherwise) related to this intervention’s use among the target population. The response should address the intervention’s ability to impact the selected local and statewide quality measures identified in Question 6 in the Hospital Application. Please submit the response in narrative form and provide links to any reference documentation (data, citations, etc.).
The Colorado Healthcare Affordability and Sustainability Enterprise (CHASE) is a government-owned business within the Department of Health Care Policy and Financing.

www.colorado.gov/hcpf

If you selected option 4 indicating that there is no known evidence base, please explain why this intervention is being proposed regardless.

Response (Please seek to limit the response to 1,500 words or less)

(1) Randomized Control Trial (RCT) level evidence

Medication assisted treatment (MAT) for opioid use disorder (OUD) has been shown to be an effective, long-term treatment for those struggling with troublesome opioid use. Buprenorphine specifically, as used in MAT, was found to be more effective than a placebo in treatment retention and limiting days of illicit opioid use (Mattick et al., 2014). Additionally, Pierce et al. (2015) studied the effects of opioid agonist pharmacotherapy (such as buprenorphine and methadone) with psychiatric support for illicit opioid users at risk of fatal drug-related poisoning (DRP). They examined 151,983 qualifying patients from April 2005 through March 2009 and found about 1,499 DRPs, or about 3.4 per 1,000 person-years. Patients were at increased risk for DRP if they were not enrolled in any treatment interventions and those receiving psychiatric treatment only had double the risk of those receiving the opioid agonist pharmacotherapy. According to Advisory Board (2018) the benefits of MAT include a 50% reduction in mortality, 29% lower health plan costs (for patients on MAT vs. patients with no medication), reduced risk of relapse, reduced risk of spreading HIV, help with withdrawal symptoms, less chance of abuse of the medication, and it allows patients to function in their daily lives.

The high number of people with troublesome opioid use seeking help in the ED has led to a need to examine whether induction on MAT drugs in the ED setting could be an effective treatment for OUD. D’Onofrio et al. (2015) studied the effectiveness of three interventions: screening and referral to treatment (referral); screening, brief intervention, and referral to treatment (brief intervention); and screening, brief intervention, ED buprenorphine/naloxone, and referral to PCP for 10-week follow-up (buprenorphine). They looked at 329 patients who were opioid-dependent between April 7, 2009 and June 25, 2013 and randomized them into the different intervention groups. At 30-day follow-up 78% of the buprenorphine group, 37% of the referral group, and 45% of the brief intervention were still engaged in treatment. The buprenorphine group went from 5.4 days of illicit opioid use to 0.9 days, the referral group went from 5.4 days to 2.3 days, and the brief intervention group went from 5.6 days to 2.4 days. There was no statistically significant difference in negative urine samples and HIV risk between the groups. They also looked at the use of inpatient addiction treatment for the three groups. Eleven percent of the buprenorphine group, 37% of the referral group, and 35% of the brief intervention group utilized inpatient addiction treatment. The authors concluded that induction on buprenorphine in the ED can be effective at increasing engagement in treatment, lowering self-reported days of illicit opioid use, and decreasing use of inpatient treatment.

A similar retrospective study conducted on 219 ED patients from May 2017 through October 2018 found similarly encouraging outcomes (Kaucher et al, 2019). Patients received buprenorphine induction and a referral to treatment while in the ED. At 30-day follow-up, 49.3% were enrolled in MAT; they also found that ED length of stay decreased by 40% during the study time.

In a follow-up study, D’Onofrio et al. (2017) studied the long-term impacts of one such ED initiated buprenorphine/naloxone program at two, six, and 12 months post-ED visit compared to referral only, and brief intervention and referral only groups. A greater number of buprenorphine patients were engaged in treatment at 2 months, but there was no statistically significant difference at six and 12 months between the groups. Additionally, the buprenorphine group had fewer days of illicit opioid
use at 2 months, but there was no statistically significant difference at 6 and 12 months between the groups.

Additionally, ED-based MAT programs could realize cost savings for hospitals (Busch et al., 2017). Busch et al. studied the cost effectiveness of three interventions for opioid dependence in the ED: brief intervention with buprenorphine and ongoing follow-up in primary care, community-based treatment (referral only), or brief intervention and referral (brief intervention). They found that ED-initiated buprenorphine treatment was most cost-effective compared to other two groups and resulted in the most illicit opioid free days in the past week.

Community partnerships are key to the successful implementation of an ED-based MAT program. Hu, Snider-Adler, and Nijmeh (2019) conducted a retrospective chart review of 49 patients at four EDs from April 2017 to December 2017 to evaluate the effect of ED buprenorphine with urgent follow-up at a community-based addictions clinic for patients in opioid withdrawal. Of the 43 patients who consented to the intervention 54% attended an initial follow-up visit, at six months 35% were still engaged, and 2.3% were weaned off opioids. Those patients who engaged in ongoing treatment had fewer ED visits at 3- and 6-months post-ED index visit (3 and 10 visits, respectively) when compared to those who did not show up for outpatient visits (28 and 40 visits, respectively) or started/stopped treatment (23 and 41 visits, respectively).

Ahmed et al. (2019) surveyed community MAT providers to get a sense of their needs when partnering with hospitals on an ED MAT program. The needs identified fell into three categories: the system should be automated, flexible, and have multiple channels for referrals; community providers should have access to HIPAA compliant metrics; and patients need to be seen by community service providers as quickly as possible.

The success of ED-based MAT programs has led the American College of Medical Toxicology to release a position statement on the use of buprenorphine administration in the ED. They support such use as a means to treat both opioid dependence and withdrawal, and prevent overdose and death after discharge from the ED. They opine that buprenorphine could be useful in bridging patients to long-term treatment providers and must always be complemented by near immediate access to ongoing buprenorphine addiction treatment. They also recognize that ED-based MAT programs have the potential to engage patients in long-term treatment. This position statement has been endorsed by ACEP (American College of Emergency Physicians) an important supporter of many of Centura’s emergency physicians.

SOURCES:


6.

a. Does the focus of the proposed intervention intersect with ongoing initiatives statewide (including, but not limited to those included in the ACC, State Innovation Model and Comprehensive Primary Care Plus)?

☒ Yes
☐ No

b. If yes, please identity the applicable statewide initiative(s): (you may select more than one response from the list below)

- Behavioral Health Task Force
The Colorado Healthcare Affordability and Sustainability Enterprise (CHASE) is a government-owned business within the Department of Health Care Policy and Financing.

www.colorado.gov/hcpf

- Affordability Road Map
- IT Road Map
- HQIP
- ACC
- SIM Continuation
- Rx Tool
- Rural Support Fund
- SUD Waiver
- Health Care Workforce
- Jail Diversion
- Crisis Intervention
- Primary Care Payment Reform
- Other: ___ (please identify)

Please also use the space below to briefly explain how the hospital will ensure the intervention aligns with the applicable ongoing initiative(s).

Response (Please seek to limit the response to 750 words or less)

Behavioral Health Task Force

This MAT intervention intersects with the state’s Behavioral Health Task Force. By offering MAT to patients presenting to the ED with opioid withdrawal and a history of inappropriate opioid use, we plan to align with the Behavioral Health Task Force’s safety net subcommittee intent of ensuring access to behavioral health care for all Coloradans regardless of situation. Our goal is to make sure that all of our identified patients have the opportunity to receive medically appropriate treatment for addiction with a seamless referral to an ongoing treatment provider in the community that can best meet their needs.

7. Please use the space below to explain any experience the hospital or any affiliated community partners have had with this type of intervention or target population and how that experience will support the success of the intervention.

Response (Please seek to limit the response to 500 words or less)

As previously mentioned, the Centura system has previous experience implementing an ED MAT program at our sister hospital, St. Anthony North Health Campus, through a grant from the State Targeted Response (STR) program. From October 2018 through August 2019, they had 120+ encounters with an OUD consultation and over 25% of them were induced on MAT and referred to an opioid treatment program (OTP). Of those patients, 60% were still in treatment at 90-day follow-up. Amber Quartier managed the grant for this program and is still with Centura in a system-level role working to coordinate substance use programming. Dr. Christopher Johnston is the ED Medical Director for St. Anthony North Health Campus. He helped author CO ACEP’s guidelines for ALTOs and ED based MAT and will continue to offer guidance for our hospital.

8. Is this an existing intervention in use within the hospital (‘existing interventions’ are those interventions the hospital has implemented or is implementing on the day it submits the Hospital Application)?
b. If yes, please use the space below to explain how the following criteria for leveraging existing interventions is satisfied (the response may reference answers above):

- The hospital must demonstrate that the use of the existing intervention is the best approach for meeting the needs of the community identified during the Community and Health Neighborhood Engagement process.
- The hospital must demonstrate that the project will be enhanced to meet HTP goals.

Response (Please respond as applicable; Please seek to limit the response to 1,000 words or less)

This will be a new intervention for our hospital.

9.

a. Will the intervention be a joint effort with another organization (e.g., a Regional Accountable Entity, Local Public Health Agency, a mental or community health center, another community organization or any other external organization)?

☐ Yes
☐ No

Partnerships are not required, but, if the hospital will partner, please complete the remainder of this question and provide the required documentation (see subpart c).

b. If yes, please complete the following chart, including listing the partner organization; listing the type of organization; indicating whether the hospital has previously partnered with the organization; and providing a high-level summary of the expected role of the organization in intervention’s leadership and implementation.

<table>
<thead>
<tr>
<th>Partner Organization Name</th>
<th>Type of Organization</th>
<th>Does the hospital have any previous experience partnering with this organization? (Yes or No)</th>
<th>Organization’s Role in Intervention Leadership and Implementation (high-level summary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front Range Clinic</td>
<td>Substance use disorder treatment provider</td>
<td>No</td>
<td>Consultative partnership to help identify and facilitate timely referral and treatment resources</td>
</tr>
<tr>
<td>Magnolia Medical Group</td>
<td>Substance use disorder treatment provider</td>
<td>No</td>
<td>Consultative partnership to help identify and facilitate timely referral and treatment resources</td>
</tr>
</tbody>
</table>
c. Please also submit documentation of the partnership with each listed organization. Documentation may be provided separately for each organization listed above and could include: a contract; a memorandum of understanding; a business association agreement; a Letter of Partnership from the listed organization(s); or similar documentation. If a Letter of Partnership is provided, in it the organization should: (1) acknowledge that it intends to partner; (2) provide a brief description of the organization; (3) express agreement with the planned intervention; and (4) express agreement with the planned role it will have in leadership and implementation of the intervention as expressed above. The letter should be signed by a member of the organization’s management and submitted with this application in the same .pdf document. The Letter of Partnership Template can be found on the HTP webpage.