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Practice Summary & Implementation Guidance

Maternal Quality and Safety Toolkit for Rural and Frontier Hospitals in Colorado

The Maternal Quality and Safety Toolkit equips rural and frontier hospitals in Colorado with practical, setting-specific tools to assess readiness, prioritize resources, and implement Alliance for Innovation on Maternal Health (AIM) Patient Safety Bundles despite limited staffing, fragmented referral pathways, and long travel distances.

Location	Topic Area	Setting
Colorado	Access to Quality Healthcare; Care Coordination; Safe and Connected Communities	Clinical

Population Focus	Date Added
Women & Maternal	Spring 2026

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Section 1: Practice Summary

PRACTICE DESCRIPTION

The Colorado Perinatal Care Quality Collaborative developed the Maternal Quality & Safety Toolkit for Rural and Frontier Hospitals in Colorado to address persistent and well-documented gaps in rural maternal health care delivery, especially limited access to obstetric services, workforce shortages, fragmented referral pathways, and long travel distances that can delay timely, safe care.

The toolkit was developed in the context of Colorado's SB24-175 Improving Perinatal Health Outcomes legislation, which requires all hospitals with a L&D to engage in at least one CPCQC-led Alliance for Innovation on Maternal Health (AIM) Patient Safety Bundle initiative. In many rural settings, pregnant and postpartum women receive care across multiple environments (outpatient clinics, labor and delivery units when available, and emergency departments), sometimes without on-site obstetric expertise. This toolkit responds to those rural realities and CPCQC's commitment to ensuring high-quality and safe perinatal outcomes regardless of geography. The toolkit is designed to support implementation of the AIM Patient Safety Bundles in rural and frontier settings by making bundle-aligned work more accessible for smaller hospitals and directly addressing common capacity constraints (staffing, specialty coverage, readiness, and referral/transfer pathways). It offers practical, adaptable resources that rural teams can use to assess readiness, identify gaps, and prioritize high-impact improvements aligned with AIM bundle concepts, without assuming an urban model of staffing or specialty coverage.

Our work primarily focuses on rural and frontier pregnant and postpartum women (and their families) receiving care in Colorado's rural/frontier communities, and the multidisciplinary teams who care for them (nurses, clinicians, ED staff, EMS partners, behavioral health, social work/case management, administrators).

The toolkit aims to accomplish rural maternal safety and quality by (1) helping teams systematically assess readiness and capacity across settings, (2) connecting teams to targeted resources and referral supports for common rural gaps (behavioral health, substance use, social drivers of health, transfer pathways, emergency readiness), and (3) providing patient- and provider-facing quick references that support continuity across multiple care settings and long distances.

CPCQC created the toolkit as a flexible, scalable resource grounded in rural practice, recognizing that rural systems often "do more with less," and that practical tools must be feasible for small teams while still supporting evidence-based, considerate care. CPCQC imagines a world where everyone has access to the healthiest pregnancy and delivery experience, no matter who they are or where they live.

CORE COMPONENTS & PRACTICE ACTIVITIES

The toolkit has four core components: (1) Setting-specific Readiness & Capacity Assessment Tools (for Outpatient Clinics, Labor & Delivery Units, and Emergency Departments) that establish a structured baseline and highlight priority gaps; (2) A curated Resource Library that links rural teams to state and national tools aligned with common capacity barriers (mental health/substance use, human resources, social drivers of health, postpartum supports, emergency/transfer readiness); (3) Patient & provider quick-reference materials that improve continuity and standardization across settings (e.g., quick care card/website, warning signs, screening

tools, hotlines); and (4) An implementation pathway ("how to use") that guides teams through assess → prioritize → act, promoting sustained QI even in low-resource environments.

Core Components & Practice Activities		
Core Component	**Activities**	**Operational Details**
Setting-specific Readiness & Capacity Assessments (Outpatient, L&D, ED)	Multidisciplinary teams complete assessment; identify "readily/sometimes/not available" elements; select priority focus areas	Three separate tools reflect rural workflows where OB services may be limited, and EDs often manage obstetric emergencies; prompts cover referrals, emergency readiness, behavioral health linkages, documentation/education, and QI processes.
Resource Library (targeted supports linked to common gaps)	Use assessment results to select resources for mental health/substance use, human resources, social drivers, postpartum supports, and emergency care services	Organized so teams can quickly find actionable options (e.g., consultation lines, directories, transport/housing/food supports, transfer resources, AIM readiness resources).
Patient & provider quick-reference materials	Distribute/print warning signs materials; use screening tools; share patient hotlines; deploy pregnancy & postpartum quick care card	Includes a wallet card + Quick Care Colorado website concept to support continuity across care settings through pregnancy and up to 1 year postpartum; includes validated screeners and hotlines.
Implementation pathway ("How to use this toolkit")	Assess → determine priority focus areas → use resource library & quick references to support action	Provides a simple adoption workflow designed for rural teams with limited time and staffing; encourages team-based completion and prioritization.

COMMUNITY WELLNESS

This toolkit supports community wellbeing by reducing rural and frontier barriers to safe maternal care and strengthening cross-setting coordination in communities where patients may need to seek care in EDs, travel long distances, or navigate fragmented referral pathways. Rural and frontier residents experience some of the most acute maternal care access disparities in the country, including fewer obstetric providers per capita, longer travel times to delivery hospitals, and a higher likelihood that pregnancy or postpartum complications first present in settings without on-site obstetric expertise. By standardizing readiness assessment and connecting teams to practical referral and support resources (behavioral health, substance use, IPV, transportation,

housing, food, and financial supports), the toolkit helps rural hospitals and clinics operationalize "whole person" maternal safety practices as part of routine care.

The toolkit promotes considerate care delivery and outcomes in three concrete ways. First, geographically: by explicitly treating the ED as part of the maternal care pathway rather than an exception, the toolkit ensures that a patient who presents at the closest rural hospital, even one without an L&D unit, receives the same quality of recognition, screening, and escalation that a patient at a tertiary center would. Second, whole-person consideration: the resource library directly links teams to behavioral health, substance use, IPV, transportation, housing, and food supports, addressing the social drivers that disproportionately shape outcomes for rural patients, patients of color, patients managing substance use disorders, and patients living with low income. Third, standardization to reduce variation and bias: validated screening tools, consistent patient education, and shared warning-signs materials reduce the practice variation and individual bias that can emerge when teams are stretched, and resources are uneven across sites.

The toolkit also recognizes that thorough care requires partnership with the people most affected. While initial development drew on input from rural clinical and administrative teams, deeper engagement with patients and families with lived experience, particularly to inform patient-facing materials and surface gaps that providers may not see, is a planned next step (see *Next Steps*).

EVIDENCE OF EFFECTIVENESS

We define success as rural teams having a feasible, repeatable pathway to implement AIM-aligned maternal safety practices across settings, even with limited staffing and specialty coverage. Signs of success include: (1) readiness assessments completed by multidisciplinary teams in outpatient, L&D (if applicable), and ED settings; (2) clear prioritization of high-impact gaps identified through the assessments; (3) adoption of standardized patient education and screening tools (warning signs materials, validated screeners, consistent discharge education); (4) strengthened referral and transfer pathways (behavioral health/substance use linkages, clear escalation/transfer processes); and (5) integration of toolkit-driven priorities into ongoing QI tracking and AIM bundle measurement where applicable.

As of May 7, 2026, the toolkit has been downloaded 508 times.

- CPCQC Implementation: CPCQC QI Advisors are actively using the readiness tools during technical assistance with rural and frontier hospitals in Colorado.
- Hospital Dissemination: The toolkit has been presented to birthing hospitals across the state, with targeted outreach through a presentation at the annual Colorado Rural Health Conference.
- EMS Engagement: The toolkit has also been shared with Colorado Emergency Medical Services leaders statewide to support coordination of obstetric care in emergency settings.
- Medical Education: The University of Colorado Anschutz School of Medicine Family Medicine Residency Rural Program is incorporating the toolkit into their rural hospital training placements.
- The toolkit is designed to align with AIM bundle implementation and can be paired with bundle-level measures and CPCQC QI infrastructure to track change over time (e.g., screening rates, linkage-to-care rates, timeliness of response/transfer processes).

Section 2: Implementation Guidance

COLLABORATORS AND PARTNERS

CPCQC built the Maternal Quality and Safety Toolkit through sustained partnership with the people who deliver rural maternal care and the systems that support them. Partnerships were established through CPCQC's existing rural hospital network and trust-based relationships built through QI Advisor technical assistance. Development was iterative and grounded in structured input from rural and frontier teams (clinical leads of AIM Patient Safety Bundle initiatives), peer perinatal quality collaboratives in similar geographies, and behavioral health and social-support partners who fill resource gaps that rural sites often cannot staff on-site. Engagement is sustained through regular technical assistance touchpoints with site champions, ongoing dissemination at statewide convenings, and feedback loops that inform toolkit revisions. Building deeper engagement with patients and families with lived experience, particularly to strengthen patient-facing materials, is a priority area of growth and is reflected in our next steps.

Practice Collaborators and Partners			
Partner/ Collaborator	**How are they involved in decision-making throughout practice processes?**	**How are you partnering with this group?**	**Does this collaborator have lived experience/come from a community impacted by the practice?**
Rural & frontier hospitals/clinics (OB, ED, nursing, QI, admin)	Ensure toolkit reflects real rural workflows, staffing realities, referrals, barriers, emergency readiness needs	Structured input (interviews/review), iterative feedback on tools, pilot-oriented implementation support	Yes—frontline clinicians and administrators serving rural patients; reflect needs of impacted communities through service delivery
Peer Perinatal Quality Collaboratives (PQCs)/state partners	Benchmark and incorporate lessons from similar rural geographies; reduce duplication and align with national best practice	Cross-state learning, content benchmarking, shared implementation lessons	Indirect—peer PQCs serve rural communities and bring systems-level experience
Behavioral health, substance use, and social	Strengthen referral pathways and access to supports that rural sites often lack on-site	Resource library curation; linking teams to directories,	Yes—many serve populations directly impacted by rural access barriers

support resource partners (state/national)		consultation lines, hotlines, communities supports	

REPLICATION

The Maternal Quality and Safety Toolkit is currently being adopted within Colorado rather than formally replicated in other states. Adoption to date includes presentation to all Colorado birthing hospitals; integration into ongoing CPCQC technical assistance with rural and frontier hospitals; sharing with Colorado Emergency Medical Services leaders to support coordination of obstetric care across pre-hospital and ED settings; and incorporation into the University of Colorado Anschutz School of Medicine Family Medicine Residency Rural Program rural rotation activities. As of May 7, 2026, the toolkit has been downloaded 508 times.

A single-site pilot is currently underway at Montrose Regional Health, a rural hospital on Colorado's Western Slope. The pilot is being led by a CU Anschutz School of Medicine MD candidate (Class of 2028) during her longitudinal clerkships, who is using the toolkit's readiness and feedback surveys as a structured way to engage providers in conversation about which components hold the most practical value in a real rural setting. Initial interviews began April 1, 2026. Early signals are encouraging: the Family Center Manager, one of the first interviewees, identified the patient Quick Care card and the QR-code resource page as immediately useful and expressed interest in incorporating both into routine discharge paperwork. She also confirmed that the Family Center is already deeply engaged in CPCQC quality improvement initiatives and familiar with many of the toolkit's referenced resources, an early validation that the toolkit aligns with the QI work rural teams are already building. The pilot is ongoing, and CPCQC will use these early findings to refine the toolkit and identify where additional implementation support is most valuable.

Lessons from rural Colorado adoption that would inform future replication: (1) the toolkit must be paired with implementation support. A downloaded PDF alone does not change practice, so technical assistance from a QI Advisor or comparable backbone organization is a key complement; (2) ED workflows are not optional in rural maternal care, and any replication setting should be encouraged to assess across outpatient, L&D, and ED rather than L&D alone; (3) referral and transfer pathways are highly local and should be customized in any new setting; and (4) sites adopting the toolkit benefit from a designated multidisciplinary champion to coordinate the readiness assessment and prioritize follow-up actions

INTERNAL CAPACITY

Hospitals adopting the Maternal Quality and Safety Toolkit do not need new funded positions to begin. The toolkit is designed for sites with limited staffing, and most adoption work is absorbed into existing roles. At minimum, an adopting site needs a multidisciplinary team that can complete the relevant readiness assessment(s) and translate findings into priority improvement actions. A typical adopting team includes a clinical champion (e.g., OB nurse manager, family medicine physician, or hospital quality director); ED leadership (charge nurse and/or ED medical director) where the ED is part of the maternal care pathway; nursing or clinical staff who can speak to current workflows; and administrative or QI support to track follow-up actions. In the smallest sites, two or three people may cover all of these roles.

Skills and supports that help adopting sites succeed: a culture that supports nurse-led and team-based QI; basic familiarity with AIM Patient Safety Bundle concepts (CPCQC offers technical assistance to all 49 birthing hospitals in Colorado); leadership willingness to allocate protected time, even an hour or two, for the multidisciplinary team to complete the readiness assessment together; and access to behavioral health, substance use, and social-support partners (in person or via consultation lines) so that referral pathways identified in the toolkit can be operationalized. CPCQC QI Advisors are available to support sites through this work and have been recommending the readiness tools during technical assistance with rural and frontier hospitals across the state.

Capacities that adopting sites often lack and that we recommend planning for: protected time for the team to meet and complete the assessment together, and a designated person to track follow-up on prioritized gaps after the assessment is complete. Sites without an established QI infrastructure should plan for a lightweight tracking approach, including a simple shared document tracking implementation, lessons learned, and ongoing needs. CPCQC can provide implementation coaching and connect adopting sites to peers using the toolkit.

PRACTICE TIMELINE

The Maternal Quality and Safety Toolkit is designed to be flexible and to meet rural and frontier hospitals where they are. There is no single required timeline, and adoption pace varies widely depending on a site's QI capacity, staffing, and competing priorities.

A typical adoption arc, observed through CPCQC technical assistance, includes (1) an initial team-based completion of the relevant readiness assessment(s), often in a single 60–90 minute session; (2) prioritization of two to three high-impact gaps from the assessment results; (3) action on prioritized gaps using the toolkit's resource library and quick-reference materials, ranging from weeks to months depending on the gap; and (4) integration of toolkit-driven priorities into ongoing AIM bundle work and QI tracking. Sites with less established QI infrastructure benefit from a longer ramp and additional CPCQC technical assistance.

For more information on this practice's timeline and specific practice activities, please contact Amber Johnson directly at ajohnson@cpcqc.org.

PRACTICE COST

The Maternal Quality and Safety Toolkit is freely available to download and adapt. There are no licensing fees and no required technology purchases for adoption.

For an adopting hospital, costs are largely staff time, primarily the time required for a multidisciplinary team to complete the readiness assessment(s), prioritize follow-up actions, and integrate toolkit-driven changes into existing workflows. Costs for follow-up actions vary considerably depending on the gaps a site prioritizes (e.g., establishing a behavioral health consultation workflow, updating patient-facing education materials, or training staff on emergency obstetric scenarios). Many of the toolkit's resources point to existing free state and national supports, including CPCQC technical assistance, AIM bundle resources, and statewide referral hotlines, that adopting sites can use without additional cost.

For CPCQC's role in supporting toolkit adoption statewide, costs include QI Advisor staff time and administrative support, embedded within CPCQC's broader perinatal health portfolio. For more information on this practice's startup costs and budgets, please contact Amber Johnson directly at ajohnson@cpcqc.org.

LESSONS LEARNED

Design for the ED and outpatient clinic, not just L&D. In many rural communities, obstetric emergencies present first to the ED and follow-up occurs in the outpatient clinic; readiness tools must reflect these workflows and needs. Prioritization beats comprehensiveness. Rural teams need a way to identify the "highest-impact feasible" steps rather than feeling responsible for implementing every AIM bundle or toolkit element at once.

Referral pathways are a clinical infrastructure. Behavioral health, substance use treatment, IPV support, transportation, and housing resources are essential "care capacity," not optional add-ons.Quick-reference tools improve continuity across distance and fragmentation. Patient-facing tools that travel across settings (and time, through 1 year postpartum) support earlier recognition and safer care-seeking.

Standardization reduces differences in quality of care. Validated screening tools and consistent education materials can reduce bias and variation when staffing is stretched.

NEXT STEPS

CPCQC plans to expand toolkit dissemination and embed it into rural-facing technical assistance and AIM bundle support, so sites can translate readiness findings into measurable QI work. Expansion includes broader reach across rural/frontier hospitals and clinics, deeper integration with existing CPCQC initiatives, and adaptation for other states seeking a scalable rural model.

CPCQC plans to:

- Develop an OB Emergencies Readiness Training for Rural and Frontier Hospitals to support skills-based learning for high-acuity, low-occurrence events in non-OB settings.
- Expand the use of the Colorado Quick Care Card statewide

RESOURCES PROVIDED

- Maternal Quality and Safety Toolkit for Rural and Frontier Hospitals in Colorado — setting-specific readiness and capacity assessment tools (Outpatient Clinic, Labor & Delivery, Emergency Department), curated resource library, patient and provider quick-reference materials, and the "How to use this toolkit" implementation pathway. Available via CPCQC at https://cpcqc.org
- Colorado Quick Care Card Implementation Toolkit — pregnancy and postpartum patient resources, including the wallet card and website concept supporting continuity across care settings through pregnancy and up to one year postpartum.

- Alliance for Innovation on Maternal Health (AIM) Patient Safety Bundles. Available at https://saferbirth.org/.

APPENDIX

- Colorado SB24-175 Improving Perinatal Health Outcomes — legislative driver requiring all Colorado hospitals with a Labor & Delivery unit to engage in at least one CPCQC-led AIM Patient Safety Bundle initiative; provides the policy context for rural and frontier toolkit adoption.
- Colorado Perinatal Care Quality Collaborative (CPCQC) —QI initiatives portfolio, QI Advisor technical assistance, and contact information at https://cpcqc.org/.