This brief highlights the major strategies, lessons learned, and outcomes from Colorado’s experience in the quality demonstration funded by the Centers for Medicare & Medicaid Services (CMS) through the Children’s Health Insurance Program Reauthorization Act of 2009 (CHIPRA). For this 5-year demonstration, CMS awarded 10 grants that supported efforts in 18 States to identify effective, replicable strategies for enhancing the quality of health care for children. With funding from CMS, the Agency for Healthcare Research and Quality is leading the evaluation of the program.

Colorado helped SBHCs to monitor quality and implement QI projects

Colorado hired quality improvement (QI) coaches to help participating school-based health centers (SBHCs) carry out QI projects. First, QI coaches worked with SBHCs to improve the delivery and documentation of preventive services recommended by the Early and Periodic Screening Diagnosis and Treatment (EPSDT) standards for well child visits. The coaches and SBHCs then addressed other QI topics given high priority by the State—pediatric overweight and obesity, depression and anxiety, sexual health, and immunizations. While working with the first of three cohorts of SBHCs, demonstration staff realized that supporting centers, many of which had limited experience with QI, took more time and resources than anticipated. As a result, the State had QI coaches worked with only 11 SBHCs in Colorado instead of 17, as originally planned. Each SBHC received $10,000 to $13,000 in grant funds for each year it participated in the demonstration. With this support, SBHCs—

- Used quality reports to guide QI efforts. CHIPRA demonstration staff generated quality reports for each SBHC from SBHC-reported data. SBHCs found it easier to collect and report data from their electronic health records (EHRs) than from paper charts, even though some centers faced challenges in programing their EHRs to automatically pull the data.

- Pursued QI projects. All participating SBHCs sought to document EPSDT preventive services more thoroughly, and they made good progress toward this goal (Figure 1). To improve performance in other priority areas as well, one SBHC provided nutrition counseling to parents of overweight children, and others held weekly meetings about patient care with community mental health providers. SBHCs made these improvements while grappling with staff turnover, competing priorities for staff time, and limited financial resources.

**Colorado’s Goals:** Work with school-based health centers to improve care for adolescents by—
- Implementing new quality improvement processes.
- Implementing an electronic screening tool.
- Engaging youth in their care.
- Promoting the patient-centered medical home model.

**Partner State:** Colorado partnered with New Mexico to design and implement demonstration strategies across both States.

![Figure 1. Increase in the percentage of adolescents seen in participating Colorado SBHCs with all EPSDT-recommended services documented](chart.png)

*Note: Data were reported by Colorado and not independently validated. The State analyzed 10 medical records at each of the 11 participating SBHCs in the fall of their first year in the demonstration (2011, 2012, or 2013 depending on the cohort) and in 2014.*
Colorado supported the implementation of an electronic risk assessment tool

To get a fuller picture of the health risks facing adolescents, demonstration staff in Colorado and New Mexico—

- **Developed an electronic questionnaire** that screens adolescents for social and behavioral risk factors, including poor nutrition, an unsafe home environment, unsafe sexual practices, substance abuse, and depressed or anxious mood. The States drew on existing tools and guidelines to develop the questionnaire and worked with information technology experts to format it for a tablet. Adolescents completed the screener at the health center while waiting to see a provider for the first time each school year. The system supporting the screener automatically flags risk factors and uploads the results to the providers’ tablets so they can discuss health risks with adolescents during their visit.

- **Implemented the questionnaire in 10 SBHCs in Colorado.** Two-thirds of the middle school students (66 percent) and just under half of the high school students (41 percent) who visited participating SBHCs during the 2013–2014 school year completed the screener. SBHCs reported that the students responded more positively to the electronic tool than to previous paper-based tools. The State also indicated that poor Internet connections, incompatibility between the screener and EHR systems, and the need for ongoing staff training made implementation difficult in some locations. To overcome these challenges, QI coaches and SBHCs worked closely with the centers’ schools or with large, affiliated health care organizations to upgrade or improve systems.

- **Helped SBHCs improve patient care and population management.** SBHC staff indicated that the electronic screener helped to identify risk factors that required followup. SBHCs also reported that aggregating the screening data helped them identify the risk factors common to their student population. For example, one SBHC found a higher-than-expected rate of substance abuse at its school and developed a school-wide awareness campaign and youth-friendly resources on the topic.

Colorado encouraged SBHCs to engage youth in their own care

The State aimed to increase youth engagement to improve their ability to access and use community health resources effectively. In conjunction with New Mexico, Colorado—

- **Developed and fielded the Youth Engagement with Health Services (YEHS!) survey.** Colorado worked with youth engagement experts, QI coaches, and students to develop the survey, which assessed youth health literacy as well as their perceptions of access and quality. SBHC staff administered more than 600 surveys to youth in Colorado, and the State used the aggregated results to identify QI topics that were a priority for youth. However, most SBHCs are not likely to continue fielding the YEHS! survey without State support.

- **Helped SBHCs implement new youth engagement strategies.** Most SBHCs had limited experience in implementing youth engagement strategies, and some were unsure about how to engage youth in a useful way. To get them started, QI coaches in Colorado distributed short reports highlighting YEHS! survey results and educated SBHCs about youth engagement strategies when they visited the centers. Several SBHCs formed youth advisory groups to get first-hand input on how to improve their services.

SBHCs implemented features of the medical home model

Colorado sought to enhance the medical home features of participating SBHCs. With help from the demonstration-funded QI coaches, SBHCs—

- **Assessed where they fell along the medical home spectrum.** Each SBHC completed the Medical Home Index—Revised Short Form to identify areas for improvement.

- **Expanded their medical home features.** In addition to the efforts described above, SBHCs pursued several other QI activities. These included creating a tracking system for referrals, developing a list of community resources for families, and establishing a memorandum of understanding with the local hospital in order to better coordinate care. As a result of their efforts, the State’s Medicaid program recognized all 11 participating SBHCs as medical homes.
Key demonstration takeaways

- SBHCs leveraged the substantial technical and financial assistance provided by the State to obtain and use data, develop new processes for monitoring and improving quality, and for engaging youth. Differences in EHR functionality, system incompatibility, and poor Internet connections made implementing these projects challenging in some locations.

- SBHCs also leveraged demonstration stipends and support from QI coaches to expand medical home features. As a result, all 11 participating SBHCs achieved medical home recognition by the Colorado Medicaid program.

- Electronic screeners administered on tablets were well received by youth. The screeners produced important information on youth’s social and behavioral health-related risk factors that helped Colorado SBHCs discuss sensitive topics with youth and improve population health management.

Continuing Efforts in Colorado

Following the CHIPRA quality demonstration grant—

- Colorado plans to use State funding that has been newly allocated for SBHCs to continue coaching them on QI, though at a reduced level.

- Colorado intends to make the electronic screening questionnaire available to all SBHCs in the State.

- Participating SBHCs will seek enhanced reimbursement under the State’s Accountable Care Collaborative program to support new QI efforts.

Endnotes

1. For more information on the EPSDT benefit, visit www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Benefits/Early-and-Periodic-Screening-Diagnostic-and-Treatment.html.

2. One SBHC decided to continue using a previously implemented screener to assess adolescent risk factors.


4. The patient-centered medical home model is a primary care model intended to improve care coordination, access to services, and patient engagement.


LEARN MORE

Colorado’s CHIPRA quality demonstration experiences are described in more detail on the national evaluation Web site available at http://www.ahrq.gov/policymakers/chipra/demoeval/demostates/co.html.

The following products highlight Colorado’s experiences—

- Evaluation Highlight No. 3: How are CHIPRA quality demonstration States working to improve adolescent health care?

- Evaluation Highlight No. 6: How are CHIPRA quality demonstration States working together to improve the quality of health care for children?

- Evaluation Highlight No. 8: CHIPRA quality demonstration States help school-based health centers strengthen their medical home features.

- Reports from Colorado: The Youth Engagement and Health Services Surveys are publicly available.