**Grantee Agency:** New Hampshire Department of Health and Human Services  
**Grant Period:** December 21, 2012–December 20, 2015  

## QUALITY IMPROVEMENT PROJECT #1

### TOPIC

Maternal and Child Health: Reducing Early Elective Deliveries

### TARGET POPULATION

Medicaid beneficiaries of childbearing age.

### SETTING

Statewide, all 20 hospitals within the state that provide obstetrical services.

### GOALS

- Establish an accurate baseline rate for the early elective delivery (EED) measure for Medicaid beneficiaries.
- Decrease the rate of EEDs for New Hampshire Medicaid beneficiaries by 2.1 percentage points from a baseline rate of 7.1% in 2012 to 5% in 2015.

### INTERVENTIONS

- Conducted high-level meetings with the New Hampshire Hospital Association (NHHA), Northern New England Perinatal Quality Improvement Networks (NNEPQIN), and the March of Dimes to identify synergies and resources for educational campaigns.
- Formed an EED workgroup composed of representatives from the New Hampshire Division of Public Health Services Maternal and Child Health Program, NHHA, the March of Dimes, NNEPQIN, and Dartmouth–Hitchcock Medical Center to move project forward.
- Developed a hard-stop policy (for elective deliveries at fewer than 39 weeks without medical indication) review tool to compile the following information about the policies: policy start date, amendment date, billing details, consultation with providers and/or administrators, explanation of approval process, required documentation of the decision between the provider and patient, inclusion of augmentation in policy, and the level of detail required in provider documentation targeting New Hampshire hospitals’ internal policies. Used this review tool to analyze all New Hampshire hard-stop policies.
- Partnered with NNEPQIN to draft clinical best practice guidelines for providers and education materials for patients, and to assist with dissemination of best practice guidelines.
- Staff compiled these recommendations for hospitals to support implementing or updating their own EED guidelines.
- Staff provided childbirth educators with training based on the updated NNEPQIN guidelines and materials from the March of Dimes.
- NNEPQIN's guidelines informed beneficiary education materials, such as Text4baby and pregnancy materials distributed by New Hampshire’s Managed Care Organizations (MCOs).

### RESULTS AND SUCCESSES

- Finalized a hard-stop policy and presented the findings of the project at the annual Northern NNEPQIN Conference.
- Worked with NHHA to disseminate practice strategies for hard-stop policies and to discuss patient education with its Medicaid MCO partners.
- New Hampshire Medicaid calculated an initial baseline EED rate of 27.85% in 2012. However, the grant team suspected that this measure was not accurate and decided to conduct a chart review of the 90 cases identified as EEDs in the initial measures numerator (90/327). After conducting the chart review, the baseline rate for 2012 was recalculated to be 7.1%. Following the recalculation, a target rate of 5% by the end of the grant was established as the goal.
CHALLENGES AND BARRIERS TO SUCCESS

- Before the Adult Medicaid Quality (AMQ) Grant, New Hampshire Medicaid could not measure with confidence the number of elective deliveries performed, primarily because of limitations of the state's birth certificate data. New Hampshire Medicaid made significant progress in overcoming these barriers.

- Birth certificate data can be used to determine the gestational age at time of delivery, but this field is not consistently populated with the medical indications for EED. To address this challenge, New Hampshire Medicaid partnered with the New Hampshire Division of Public Health Services' Maternal and Child Health Section to link data sources such as birth certificates, hospital discharge forms, and Medicaid claims to develop an accurate indicator of the medical indications for elective deliveries in the state.

- Insufficient claims data to calculate the measure led New Hampshire Medicaid to pursue data linkages with vital records data, a time-consuming effort that required partnering with New Hampshire’s only maternal and child health epidemiologist within the state personnel.

- New Hampshire Medicaid attempted to report on this measure by linking data sets. The two-part analysis emphasized the need for chart review with this measure because there was a large discrepancy in rates depending on the method of analysis, with data collected from administrative claims being highly inaccurate. Better coding would have yielded a more accurate EED rate.

QUALITY IMPROVEMENT PROJECT #2

GOALS

- Increase acute phase medication adherence by 3 percentage points from the 2013 baseline rate of 55% to the target rate of 58% in 2015.
- Increase continuation phase medication adherence by 3 percentage points from the 2013 baseline rate of 36% to the target rate of 39% in 2015.
- Test pharmacy claims data to identify beneficiaries with depression.

INTERVENTIONS

- Used pharmacy data and developed a two-stage mailing, one stage each for the acute and continuation phases of medication use.

- Mailed letters to the prescribers of new antidepressant medications. The mailing included a letter to the patient encouraging continued use of antidepressants and a prepaid postage letter addressed to the patient. The provider then mailed the letter to the patient, assuming that the patient would be more likely to listen to the prescriber than the New Hampshire Medicaid office.

- Conducted a second targeted mailing to the same group of prescribers to encourage ongoing adherence for antidepressant medication use through 180 days after the first prescription.

RESULTS AND SUCCESSES

- Completed the intervention phase in late June 2014 and began analysis in July 2014.

- Mailing 1: 529 packets were successfully mailed to 409 prescribers. New Hampshire Medicaid received 115 responses from prescribers (21.7%). Of the 115 responders, 42 indicated that the prescriber mailed the letter to the beneficiary (36.5%), resulting in an overall beneficiary mailing rate of 7.9% (including the non-responders).

- Mailing 2: 539 packets were successfully mailed to the same group of 409 prescribers. New Hampshire Medicaid received 142 responses from prescribers (26.3%). Of the 142 responders, 40 indicated that the prescriber mailed the letter to the beneficiary (28.2%), resulting in an overall beneficiary mailing rate of 7.4% (including the non-responders).

- Of the 554 beneficiaries in the quality improvement project (QIP) target population, 155 (28%) had an initial depression diagnosis. These results show that pharmacy data in most instances are not an early indicator of a depression diagnosis.
CHALLENGES AND BARRIERS TO SUCCESS

• The grant team got a late start on implementing the medication management QIP because of delays in refining the process for flagging pharmacy claims and Medicaid claims data lags.

• In developing a process for flagging newly prescribed antidepressant medications, the grant team realized that antidepressant medications are used for many other clinical indications in addition to treating depression.

• The solution to this challenge was to compare pharmacy data with administrative claims to determine patient diagnosis. However, claims data run-out takes approximately 3 to 6 months. No other short-term workaround was devised.

PARTNERSHIPS

INTERNAL
• New Hampshire Division of Public Health Services assisted New Hampshire Medicaid in establishing an accurate indicator of elective deliveries before 39 weeks.

EXTERNAL
• New Hampshire Division of Public Health Services Maternal and Child Health Section created data linkages to address the insufficiency of claims data to produce the PC01-AD measure needed for QIP #1, and participated in the EED workgroup.

• NNEPQIN participated in the EED workgroup and assisted in drafting clinical best practice guidelines, assisted with provider and beneficiary education work, and helped with dissemination.

• NHHA assisted New Hampshire Medicaid with patient education with its Medicaid MCO partners and dissemination of practice strategies. NHHA also participated in the EED workgroup.

• March of Dimes worked with New Hampshire Medicaid to identify synergies in scopes of work, helped to identify potential resources for educational campaigns, and participated in the EED workgroup.

• American College of Obstetrics and Gynecology supplied resources for providers.

• Dartmouth–Hitchcock Medical Center participated in the EED workgroup.

DEVELOPING STAFF CAPACITY AND INFRASTRUCTURE

STAFF CAPACITY
• All four full-time staff members hired and funded under the AMQ Grant will continue to be funded in New Hampshire Medicaid’s budget beyond the end of the grant.

• Project manager and QIP coordinator positions were filled. At the time of the most recent report, one of the two analyst positions has been filled; the other was still posted.

• Cross-training for the two new hires on the New Hampshire AMQ Grant will be ongoing with University of New Hampshire staff. Additional training opportunities were scheduled with the National Committee for Quality Assurance (NCQA) on Healthcare Effectiveness Data and Information Set measures.

• Beyond NCQA trainings, Medicaid Quality Program staff have enrolled in specific software trainings, including Microsoft Excel, Global Information Systems, and SAS.

• In addition, Medicaid Quality Program staff planned to achieve various credentials, including Lean Six Sigma practitioner certification and Certified Professional in Healthcare Quality.

INFRASTRUCTURE
• As a result of the AMQ Grant, the state launched the Medicaid Quality Information System (MQIS) to streamline production of quality measures.

LESSONS LEARNED
• State hiring processes can impact the project.

DATA COLLECTION AND ANALYTICS

DATA COLLECTION
• New Hampshire successfully reported 16 of the Medicaid Adult Core Set of Adult Health Care Quality Measures.
(referred to as the Medicaid Adult Core Set) to the Centers for Medicare & Medicaid Services (CMS) for both the 2013 and 2014 performance years, exceeding the minimum requirement of 15 measures.

• Purchased data analytics software, including the MQIS, ArcGIS, and SAS.

• Trained the two MCOs to submit data to the MQIS.

• Built capacity to take in data from various sources to produce the Adult Core Set measures and other quality measures.

• For QIP #2, medical claims data availability was delayed until 2015 because of the launch of a novel New Hampshire Medicaid Management Information System (MMIS).

DATA ANALYTICS

• Stratified the Hemoglobin A1c Testing measure by race/ethnicity, gender, urban/rural status, and disability status. Stratified the Cervical Cancer Screening measure by race/ethnicity, urban/rural status, and disability.

• New Hampshire Medicaid launched an MQIS. The new system can fully automate data collection and aggregation from the MCOs and fee-for-service program across several different data sources. The MQIS will support the continued reporting of the Adult Core Set measures.

• The MQIS can generate customized reports with trends and comparison data.

• In 2015, New Hampshire Medicaid planned to stratify the Postpartum Care Rate and Controlling High Blood Pressure measures by race/ethnicity and urban/rural status.

LESSONS LEARNED

• Great progress can be accomplished in measure development and quality improvement through relationships with other departments and organizations throughout the state.

• Building and implementing a comprehensive and sophisticated data system like the MQIS takes more time than expected, as well as carefully planned training and ongoing support for data submitters.

• New Hampshire Medicaid staff were unaware of the great range in cost for some measures and reported these findings in a presentation to the National Quality Forum.

• The new MMIS was launched; however, the implementation of the system’s ability to produce encounter data continues to be a barrier to the quality program.

PROMISING PRACTICES

QUALITY IMPROVEMENT

Pharmacy claims data may be a timelier alternative to Medicaid claims for informing medication management QIPs.

QUALITY MEASUREMENT

Although this MQIS was designed for New Hampshire, it could be deployed to other states.

PLANS FOR SUSTAINABILITY

New Hampshire Medicaid plans to continue collecting and reporting the Adult Core Set measures after the end of the grant period; the measures have been incorporated into the MQIS and Medicaid MCO reporting requirements.

New Hampshire has developed a solid Medicaid quality team that will remain on staff beyond the grant period.

The MQIS will also support the production of other quality measures to inform the efforts of the Medicaid Quality Program.

Expansion of the focus on Medicaid quality planning will not only ensure the future of the Medicaid quality efforts, but will also create a context and surrounding culture of quality that has not been fully developed before in New Hampshire.

New Hampshire Medicaid collaborates closely with the two MCOs serving the majority of New Hampshire’s Medicaid population. Upon completion of the AMQ Grant, the New Hampshire Department of Health and Human Services will work closely with the MCOs to continue quality data analysis and quality improvement efforts.

QUALITY DIFFUSION

The New Hampshire AMQ team launched a New Hampshire Medicaid Quality Program public website in December 2014 (http://medicaidquality.nh.gov/).

The New Hampshire AMQ team also presented at conferences, including the NNEPQIN Fall Conference, and made a presentation for the National Quality Forum.

Presented AMQ Grant work and revised the guidelines for elective delivery, which were approved in May 2015, at the NNEPQIN Fall Conference.

The New Hampshire AMQ team presented at the 2015 CMS Quality Conference on the development of the MQIS and related AMQ Grant activities.