Reducing Resident Readmissions: The Pierce County Medicaid Nursing Home Collaborative

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Overview

The Washington State Department of Social & Health Services (DSHS) and Qualis Health engaged 14 nursing homes serving diverse populations in Pierce County, using data-driven quality improvement methods to improve care transitions and reduce unnecessary rehospitalizations among Medicaid clients. The homes participated in a shared-learning Collaborative that taught proven methods to implement evidence-based tools aimed to improve care coordination for nursing home residents. As a result, during the Collaborative and its subsequent 3-month sustainability monitoring period, 170 rehospitalizations were prevented, which was a 34% relative improvement over baseline.

Strengthening States’ ability to use data in measuring and improving the quality of care for the approximately 30 million adults currently enrolled in Medicaid is a priority for The U.S. Department of Health and Human Services and the Centers for Medicare & Medicaid Services (CMS). Funding for the Adult Medicaid Quality Grant Program: Measuring and Improving the Quality of Care in Medicaid was granted to 26 state Medicaid agencies in 2012.

In Washington State, the local grant awardee was the Washington State Department of Social and Health Services (DSHS). Qualis Health was contracted by DSHS to lead the Pierce County Medicaid Nursing Home Collaborative. The project involved nursing homes working together for 18 months to individually test system changes aimed at reducing avoidable hospital readmissions and to collectively share learning.

The goal of the Collaborative was to reduce 30-day rehospitalizations by 10% between April 2013 and June 2014. Facilities submitted data to Qualis Health tracking admissions and rehospitalizations each month for the duration of the Collaborative. Between baseline and the three month monitoring period after the Collaborative ended, there was an absolute decrease of 5.54% for a relative improvement rate of 34%.

**Figure 1: Decrease in Percent of Nursing Home Residents Rehospitalized Within 30 Days**

<table>
<thead>
<tr>
<th>Percentage of Nursing Home Admissions Rehospitalized Within 30 Days</th>
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<tbody>
<tr>
<td>Baseline: November 2012 – March 2013</td>
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<tr>
<td>First 6 months of the Collaborative: April – September 2013</td>
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<tr>
<td>Last 6 months of the Collaborative: January – June 2013</td>
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<tr>
<td>3 months post-Collaborative monitoring: July – September 2014</td>
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During the Collaborative and its subsequent 3-month sustainability monitoring period, 170 rehospitalizations were prevented, a 34% relative improvement over baseline.
In the 18 month project (April 2013—September 2014), the decrease in rate resulted in cumulatively 170 fewer rehospitalizations than would have been expected if rates had remained constant. Using the average cost of a Medicare rehospitalization in 2012 in Washington State ($11,621), these prevented readmissions during the 18 month project resulted in a savings of approximately $2M.

The Opportunity

The rate of hospital transfers in nursing homes is a topic of national interest in improving care transitions and reducing avoidable rehospitalizations. Up to two thirds of hospital transfers are rated as potentially avoidable by expert long-term care professionals. Such transfers can result in numerous complications of hospitalization and billions of dollars in unnecessary health care expenditures. Early identification, assessment, documentation and communication about changes in the status of residents in skilled nursing facilities are essential to improving care and reducing the frequency of potentially avoidable transfers to the acute hospital.

The purpose of the Pierce County Medicaid Nursing Home Collaborative was to decrease avoidable rehospitalizations by improving the effectiveness and efficiency of nursing home treatment. This was accomplished through the application of evidence-based practices to the processes of assessment, treatment, and monitoring of nursing home residents. The goal of the Collaborative was to deepen the organizational commitment to improved systems of care for frail and chronically ill Medicaid patients within the nursing home setting and between and among all providers in the local community.

The 18 month project resulted in a savings of approximately $2M.

Participants

- Alaska Gardens Health and Rehabilitation Center, Tacoma, WA
- Avamere Heritage Rehabilitation of Tacoma, WA
- Avamere Skilled Nursing of Tacoma, WA
- Cottesmore of Life Care, Gig Harbor, WA
- Heartwood Extended Health Care, Tacoma, WA
- Linden Grove, Puyallup, WA
- Nisqually Valley Care Center, McKenna, WA
- Orchard Park Health Care Center, Tacoma, WA
- Park Rose Care Center, Tacoma, WA
- Puyallup Nursing and Rehabilitation Center, Puyallup, WA
- Tacoma Lutheran Retirement Community, Tacoma, WA
- Tacoma Nursing and Rehabilitation, Tacoma, WA
- University Place Care Center, University Place, WA
- Washington Soldiers Home, Orting, WA

Pierce County was selected because it had among the highest 30-day rehospitalization rates in Washington State as well as one of the highest rates of per capita SNF utilization. In addition, Pierce County ranks below the state and national average annual wages and has a higher proportion of minorities than statewide.
Taking Action

DSHS and Qualis Health worked together with 14 nursing homes serving diverse populations in Pierce County, Washington using the Institute for Healthcare Improvement (IHI) Collaborative model to reduce 30-day rehospitalizations for residents by 10% from data collected April 2013 to September 2014. The Collaborative model developed by IHI is a systematic approach to healthcare quality improvement in which organizations and providers test and measure practice innovations, then share their experiences in an effort to accelerate learning and widespread implementation of best practices.

The structure consists of Pre-work and three Learning Sessions, each followed by Action Periods and an Outcomes Congress at the end of the Collaborative as indicated the illustration below:

**Figure 2: Pierce County Medicaid Nursing Home Collaborative Road Map**

- **Learning Session**
- **Action Period**
- **Plan-Do-Study-Act**

The Learning Sessions (Figure 3) were the major interactive events of the Collaborative. Through plenary sessions, small group discussions, and team meetings, attendees had the opportunity to:

- learn from faculty
- receive individual coaching
- gather knowledge on the subject matter and on process improvement
- share experiences and collaborate on improvement plans
- problem solve barriers to improving care

The participants learned about quality improvement science methods such as aim statements, defined measures, Plan Do Study Act (PDSAs) and run charts. During the Learning Sessions nursing homes also learned how to use evidence-based tools such as INTERACT™ (Interventions to Reduce Acute Care Transfers) Program to reduce rehospitalizations.
In addition to the Outcomes Congress at the end of the Collaborative, Qualis Health and DSHS had site visits with each participating nursing home to provide technical assistance for sustainability. The nursing homes also gave feedback as to what worked and ways the Collaborative could be improved.

A key focus for incorporating best practices for the nursing homes in the Collaborative was the INTERACT Program. The INTERACT Program is a quality improvement program that focuses on the management of acute change in resident condition. It includes clinical and educational tools and strategies for use in every day practice in long-term care facilities. INTERACT is designed to improve the early identification, assessment, documentation, and communication about changes in the status of residents in skilled nursing facilities with the goal to improve care and reduce the frequency of potentially avoidable transfers to the acute hospital.

The nursing homes in the Collaborative used the INTERACT Hospitalization Rate Tracking Tool. It helped nursing homes:

- identify populations and sub-populations at-risk for transfers and in possible need of standardized care practices
- track care delivered to individual and sub-populations of residents
- identify trends among populations at risk
- allow Collaborative leadership to utilize data for trending and outcomes measurement

The INTERACT Hospitalization Rate Tracking Tool was the primary way nursing homes collected patient-level data about hospitalizations within their own nursing homes.

Figure 3: Storyboards showing progress are shared at a Learning Session
Achieving Results

During the 18 month project, there were 170 rehospitalizations prevented and significant monetary savings. Using the average cost of a Medicare rehospitalization in 2012 in Washington State ($11,621), these prevented readmissions resulted in a savings of approximately $2M.

In addition to the healthcare cost savings, the reduction improved quality of life for people by allowing them to receive care in a residential setting and reduce the risks associated with rehospitalization.

Figure 4: Decline in 30-day Rehospitalization Rate

Additionally, the participating nursing homes improved staff assessment skills, standardized communication processes and empowered all staff to make a difference.
Acknowledgements

Many organizations and individuals contributed to the Collaborative. We would like to recognize the following organizations and individuals for providing direction, funding, and expertise.

We are particularly grateful to the fourteen facilities that committed to improving care for residents over the 18 month time period by implementing INTERACT tools and sharing lessons learned with participating colleagues.

The U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services (CMS) provided funding for the Adult Medicaid Quality Grant: Measuring and Improving the Quality of Care in Medicaid.

The Washington State Department of Social and Health Services (DSHS) is the local awardee of the Adult Medicaid Quality Measures Grant, directing activities in Washington State. We give special thanks to Kathy Sweeney, MA, Outcome Improvement Specialist Program Manager; Beverly Court, PhD, Research and Data Analysis Division and Candace Goehring, Chief of the Office of Service Integration for their support of the Collaborative.

The Institute for Healthcare Improvement (IHI) developed the Breakthrough Series Collaborative learning methodology including the Model for Improvement with colleagues from Associates in Process Improvement.

The INTERACT™ Program and its founders Joseph G. Ouslander, M.D. and Mary Perloe, MS, GNP at the Georgia Medical Care Foundation with the support of a contract from the Centers for Medicare & Medicaid Services (CMS). The current versions of the INTERACT Program were developed by an interdisciplinary team under the leadership of Dr. Joseph G. Ouslander, M.D. with input from many direct care providers and national experts in projects based at Florida Atlantic University (FAU). We give special thanks to Dr. Ouslander for his support of the Collaborative.

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1 CMS Public Use Geographic Variation File, 2012.
4 See https://interact2.net/index.aspx