Practice Concepts and Policy Analysis

Kathleen Walsh Piercy, PhD, Editor

Minnesota’s Nursing Facility Performance-Based Incentive Payment Program: An Innovative Model for Promoting Care Quality

Valerie Cooke, BA, BS,*† 1 Greg Arling, PhD, 2 Teresa Lewis, BA, 3 Kathleen A. Abrahamson, PhD, RN, 4 Christine Mueller, PhD, RN, FAAN, 5 and Lisa Edstrom, MBA 6

1 Nursing Facility Rates and Policy Division, Department of Human Services, St Paul, Minnesota.
2 Indiana University Center for Aging Research, Indiana University School of Medicine, Indianapolis.
3 Nursing Facility Rates and Policy Division, Department of Human Services, St Paul, Minnesota.
4 Department of Public Health, Western Kentucky University, Bowling Green.
5 School of Nursing, University of Minnesota, Minneapolis.
6 Center on Aging/Minnesota Area Geriatric Education Center, University of Minnesota, Minneapolis.

* Address correspondence to Valerie Cooke, BA, BS, Nursing Facility Rates and Policy Division, Department of Human Services, PO Box 64973, St Paul, MN 55164-0973. E-mail: valerie.cooke@state.mn.us

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Purpose: Minnesota’s Nursing Facility Performance-Based Incentive Payment Program (PIPP) supports provider-initiated projects aimed at improving care quality and efficiency. PIPP moves beyond conventional pay for performance. It seeks to promote implementation of evidence-based practices, encourage innovation and risk taking, foster collaboration and shared learning, and establish a solid case for investing in better quality from the perspective of the state, providers, and consumers. We explain PIPP rationale and design, describe projects and participating facilities, and present findings from interviews with project leaders. Design and Methods: Provider-initiated projects lasting from 1 to 3 years are selected through a competitive process and are funded for up to 5% of the daily operating per diem rate. Providers are at risk of losing up to 20% of their project funding if they fail to achieve targets on state nursing facility performance measures. Results: Minnesota has made a major investment in the PIPP by supporting 45 individual or collaborative projects, representing approximately 160 facilities and annual funding of approximately $18 million. Projects involve a wide range of interventions, such as fall reduction, wound prevention, exercise, improved continence, pain management, resident-centered care and culture change, and transitions to the community. Implications: The PIPP can serve as a model for other states seeking to promote nursing facility quality either in combination or in place of conventional pay-for-performance efforts.

Key Words: Medicaid, Reimbursement, Evaluation, Value
Medicare and several state Medicaid programs have adopted pay-for-performance models that reward nursing facilities for better quality (Arling, Job, & Cooke, 2009; Briesacher, Field, Baril, & Gurwitz, 2009), linking payment to performance on standardized quality measures. The best providers or those showing the most improvement receive the highest payments. Pay for performance should, in theory, encourage providers to invest in better quality of care.

Nursing facility pay for performance has received only limited research (Arling et al., 2009; Briesacher et al., 2009). Studies of pay for performance in other settings such as health plans, hospitals, physician practices, or individual providers have yielded generally disappointing results (Christianson, Leatherman, & Sutherland, 2007; Dudley, Robinowitz, Talavera, Broadhead, & Luft, 2004; Petersen, Woodard, Urech, Daw, & Sookanan, 2006; Rosenthal & Frank, 2006; Town, Kane, Johnson, & Butler, 2005). Pay-for-performance programs have encountered problems in measuring performance, convincing providers to participate, structuring effective incentives, and changing provider behavior. Organizational and resource barriers have stifled quality improvement efforts for many providers. Providers have also been uncertain about the business case for better quality (Kilpatrick et al., 2005; Leatherman et al., 2003; Reiter, Kilpatrick, Greene, Lohr, & Leatherman, 2007). Given these concerns, we may well benefit from a new approach to pay for performance.

**Minnesota’s Approach to Nursing Facility Pay for Performance**

Minnesota has been at the forefront of nursing facility programs to provide incentives for quality (Kane, Arling, Mueller, Held, & Cooke, 2007). The state has developed comprehensive quality measures tied to payment rate increases and made publicly available through the Minnesota Nursing Home Report Card. Despite this system’s strengths, providers were initially slow to respond to performance-based payment methods. They resisted its top–down mandates, they had difficulty selecting quality measures to concentrate their efforts, they were unsure how to intervene to improve their quality, and they were hesitant to invest in quality improvement because of uncertainty about return on investment.

State policy makers decided to take a fresh approach to pay for performance. In 2006, the Minnesota Legislature established the Nursing Facility Performance-Based Incentive Payment Program (PIPP). PIPP connects performance-based incentive payments with quality improvement projects, capitalizing on financial incentives while focusing facility efforts on tangible quality improvement projects. The program takes a grassroots approach encouraging local organization solutions to quality problems rather than the top–down approach characterizing earlier efforts. PIPP strives to:

1. Support efforts to improve quality, increase efficiency, and/or shift resources from institutional to community care;
2. Demonstrate how evidence-based practices can improve the quality and efficiency of care;
3. Encourage providers to innovate and take risks;
4. Foster collaboration and shared learning both within and between organizations;
5. Establish a business case for investment in better quality from the perspective of multiple stakeholders—Medicaid, providers, and consumers; and
6. Identify the key elements of successful quality improvement efforts, costs and benefits, and how they might be disseminated across the nursing home industry.

The PIPP can serve as a model for other states embarking on nursing facility pay for performance. We explain the program design, describe the projects and participating facilities, and the ongoing efforts to evaluate and improve the program’s effectiveness.

**PIPP Design**

The Minnesota Department of Human Services (DHS) publishes an annual Request for Proposals (RFP). All Medicaid-certified nursing facilities are invited to submit a proposal, and collaborative proposals involving multiple nursing facilities are encouraged. Facilities can request an incentive payment up to 5% of their operating rate per diem for 1–3 years. Incentive payments range from $.32 to $13.32 with an average incentive payment of $5.25 per day. The amount of the incentive payment varies based on project scope and complexity.

Proposal requirements include:

1. A detailed description of the project, including the goals, basis for assuming the goals can be achieved, characteristics of residents anticipated
to participate, the precise nature of the intervention, and resources and time line needed;
2. For collaborative projects, the rationale for the collaborative and a clear plan of leadership and member involvement;
3. How performance outcomes will be measured, reported, and evaluated, including baseline data, performance period, and targeted levels to be achieved; and
4. A provision that puts the provider at risk of losing a minimum of 20% of the proposed incentive payment if the stated outcomes are not achieved.

Following publication of the RFP, DHS sponsors statewide seminars to help providers understand the components of a successful proposal, identify valid outcome performance measures, baseline data and performance targets, and understand the rate impact for both successful projects and those not meeting performance targets.

An independent selection committee evaluates the proposals and considers how well the project addresses program goals, strength of evidence for the potential success of the project, validity of the outcome measures, and the likelihood of broad-based dissemination and sustainability. DHS then specifies selected project details (e.g., intervention, outcomes, performance period, and the willingness to participate in program evaluation) in provider contracts.

Provider incentive payments are added to their per diem rates. With the contribution of federal participation and private pay residents (whose per diems are specified under Minnesota rate equalization), PIPP funding results in approximately $18 million available for projects annually.

Projects and Facilities

One hundred and fifty-eight of Minnesota’s 383 nursing facilities are currently implementing 45 PIPP projects. Twenty projects (19 individual facilities and one collaborative project with 13 facilities) were funded in Round 1, whereas Round 2 selected 25 projects (8 individual facilities and 17 collaborative projects representing 128 facilities). The funded projects took diverse approaches toward program goals. Table 1 lists project topics focusing on psychosocial, rebalancing, or organizational change goals, possibly as these tended to be more complex.

The number of proposals received far exceeded funded projects. Round 1 (State Fiscal Year 2008) generated a great deal of industry interest, with 166 facilities submitting 155 proposals. DHS received only 92 proposals in Round 2 (State Fiscal Year 2009); however, 238 facilities or 62% of all facilities were represented. About one fourth of facilities submitted one or more proposals which were not selected, whereas a one third of facilities have submitted no proposals. Possible motivations for these nonparticipating facilities, which warrant further study, may include not having heard of the program, perception that they do not have the skills or resources to participate, or some other real or perceived barrier to participation.

We wanted to determine if the PIPP was having broad appeal or if it was attracting facilities with the most resources or the best performance. Therefore, we compared facilities having funded projects with those that were not funded or did not submit a proposal (Table 2). The funded facilities were significantly more likely to be urban, freestanding, not for profit, and part of a nursing home chain, with more nursing home beds and somewhat higher average acuity levels. Chain affiliation in particular seemed to facilitate involvement in collaborative projects, as these facility groups took advantage of shared leadership and resources, and were perhaps encouraged to participate by their respective controlling organizations that may have viewed PIPP as a business opportunity. Although these characteristics can indicate more facility resources, the lack of significant difference in per diem acuity-adjusted costs suggests that less resource-rich facilities are also participating.

Finally, we examined facility quality to determine if the program appeals more to those with higher or lower initial performance; however, participating facilities were similar to other facilities on most Minnesota Nursing Home Report Card quality measures. Table 2 shows the average number of stars for the seven quality measures (1–5 stars range, 5 = highest and 1= lowest quality). The funded facilities had significantly lower staff retention scores and significantly higher private resident room scores; however, they were not significantly different in scores on resident quality of life, clinical quality indicators (QIs), state inspection results, direct care staffing levels, or use of temporary nursing staff.
Table 1. Performance-Based Incentive Payment Program Projects by Topic and Process or Outcome Measures

<table>
<thead>
<tr>
<th>Theme</th>
<th>Project area</th>
<th>Projects (facilities)</th>
<th>Process or outcome measures</th>
</tr>
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<tbody>
<tr>
<td>Clinical quality</td>
<td>Fall reduction, strength training, sleep, pain management, osteoporosis, bathing, skin care, congestive heart failure, wound care, pressure sore prevention, incontinence, targeted therapy</td>
<td>16 (96)</td>
<td>Clinical indicators (behavior, mood, continence, pain, falls, pressure ulcers, physical function), resident self-reported quality of life (satisfaction, comfort), pain-related quality of life, fear of falling, decrease in hospitalizations from transitional care</td>
</tr>
<tr>
<td>Psychosocial</td>
<td>Dance program, music therapy, behavior management, cognitive care</td>
<td>5 (19)</td>
<td>Clinical indicators (behavior, mood, antipsychotics, pain), resident self-reported quality of life (satisfaction, relationships, individuality, meaningful activities, mood), Geriatric Depression Scale, Mini-Mental State Examination, Sit Stand Fall Assessment</td>
</tr>
<tr>
<td>Rebalancing</td>
<td>Community transition skills, rehabilitation</td>
<td>4 (11)</td>
<td>Days in a nonnursing facility care setting, nursing facility referrals to home care, decrease in hospitalizations from home care, length of short stays, pain severity scale</td>
</tr>
<tr>
<td>Organizational change</td>
<td>Person-centered care, culture change, nursing assistant mentoring</td>
<td>6 (14)</td>
<td>Clinical indicators (behavior, mood, falls, weight loss), resident self-reported quality of life (satisfaction, meaningful activities, food enjoyment, autonomy, individuality, relationships), staff retention</td>
</tr>
<tr>
<td>Technology</td>
<td>Safe patient handling, call or alarm systems, environmental modifications</td>
<td>13 (28)</td>
<td>Clinical indicators (incontinence, falls), resident self-reported quality of life (comfort), resident and staff injuries, missed work after staff injury, reduced use of resident wander-guard devices</td>
</tr>
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**Early Provider Experiences in Implementing Performance-Based Improvement Projects**

In order to better understand the experiences of providers participating in the program, DHS contracted with Indiana University (IU) and the University of Minnesota (UMN) to conduct a preliminary evaluation of the program in January to June 2009 using a variety of techniques. Initially, the IU and UMN researchers carried out a series of telephone interviews with project leaders. They drew a purposive sample of projects with a range of quality improvement areas, scope, and stages of completion. They conducted structured 45- to 60-min telephone interviews with 15 project leaders from seven projects: three projects addressed culture change or resident-centered care, two addressed exercise and/or rehabilitation, one focused on pain management, and one focused on fall prevention. Next, the IU and UMN researchers conducted a 2-hr-in-person group interview with 20 leaders from a collaborative project on falls prevention during their monthly leadership meeting. In addition, the research team conducted on-site observations and interviews at four facilities: one facility was implementing a strength-training program, one facility that had heretofore focused on long-stay residents was introducing a transitional care unit to encourage community discharges, and two facilities were implementing falls prevention programs. At these facilities, individual interviews were conducted with project leaders, and group interviews were conducted separately with licensed nursing staff (four to six per facility), nursing assistants (four to seven per facility), and therapy, activity, or other staff members with project responsibilities (three to five per facility). Also, the research team toured the facilities and observed staff members carrying out the project interventions for 30–60 min in each facility. Finally, during a PIPP project conference, IU and UMN researchers collected data from 30 project leaders who participated in a 1-hr group discussion.
These project leaders represented a cross section of projects with regard to size, scope and emphasis area, and stage of completion. The discussion groups followed a format of brainstorming, consolidating, and reporting back to the plenary session about implementation successes and challenges. The research team systematically reviewed notes and recordings from all interviews, site visits, and discussions to identify common themes across projects and settings.

In nearly every case, the leadership and staff were highly enthusiastic about their projects, felt they were succeeding, and were learning a great deal about the quality improvement process. The following themes emerged.

**Motivation**

Project leaders were unanimous in stressing the PIPP’s importance in motivating them to carefully plan a specific quality improvement project as well as take risks. Many leaders commented that they could not have undertaken a quality improvement project of this magnitude without the additional funding provided by the program.

**Having a Solid Foundation**

All leaders agreed that project leadership must build on a solid foundation. Project development was often data driven and focused on identified areas of quality problems, such as poor performance...
on specific QIs. Though some of the projects were developed from “the top–down,” with administration leading the quality improvement effort, a number of leaders stressed the importance of involving residents, family members, and staff early in the project development process. Input was obtained through focus groups, resident and/or family surveys, and staff meetings. Peer support among members of a collaborative or experiences of other facilities that had previously undertaken quality improvement projects were pivotal in project selection and design. Several leaders noted their project had a steep learning curve for both leadership and staff; they recommended beginning the education process well before project implementation.

**Choice of the Right Quality Measures**

A frequent concern of project leaders was selection of the most accurate measures for quality improvement. Most project leaders felt that using standardized measures such as QIs or the Minnesota Resident Quality of Life Survey was preferable to creating their own measures, and it allowed them to compare their performance against their peers. At the same time, some project leaders and staff felt that standardized measures can miss small but important changes in resident health, functioning, and quality of life. Some providers saw improvement in areas they had not anticipated and wished they had chosen different performance measures. For example, a falls project leader noted an unexpected improvement in incontinence rates, a measure they had not selected when developing their proposal. Overall, providers stressed the need to carefully select performance measures, recognizing that the project may have spillover effects to several areas of quality.

**Complexity of the Resident Population**

Project leaders found it challenging to address the complexity and various needs of the resident population. For example, residents on transitional care units and residents on dementia-focused special care units required very different approaches in assessing and managing pain. Leaders and staff stressed the importance of flexibility and adaptability in dealing with different resident circumstances.

**Staff Buy-In**

Leadership and staff identified staff support as a critical element in project success. Beginning with influential staff members, both those who reacted positively and those with initial negative feelings about the project, was crucial to gaining widespread support of staff. Presenting staff with evidence of likely project success was a key to staff buy-in. Staff became more engaged in the project when they could see improvements in resident quality of life and when they observed that better clinical outcomes such as fewer falls, less pain, and improved continence resulted in less paperwork and a reduced workload.

**Enhanced Communication**

Many projects necessitated widespread staff involvement. The success of a fall prevention program, for example, rests on the participation of staff from nursing to housekeeping in recognizing and addressing fall risks. Several project leaders stressed the importance of open communication between staff members, particularly between licensed nurses and nursing assistants and between nursing and other staff. They also emphasized joint problem solving and patience and flexibility in dealing with coworkers.

**Effective Leadership and Community Building**

Everyone agreed that project success hinged on effective leadership that has credibility and gains the trust of staff, encourages ownership of the quality improvement effort at all levels of the organization, and empowers residents to become involved in the quality improvement process. Project leadership also needs to build a sense of community, generate enthusiasm through increased teamwork, instill a feeling of common purpose focusing on the needs of residents, and strengthen ties between staff and residents.

**Patience and Flexibility**

Every project leader stressed the importance of being realistic about the time and resources required to meet project objectives and improve performance. The magnitude and complexity of a quality improvement project cannot be overestimated. Leaders emphasized starting small, keeping goals simple and realistic, and building on successes. Given the uncertainties of organizational change, leaders felt the need to be flexible and ready to make necessary alterations in project plans. Finally, leaders valued customizing projects
to a local context, taking into account the people and culture of the individual facility and unit.

**Sustainability**

A major concern was how to sustain the project beyond the funding period. There was hope that improved quality outcomes would eventually be rewarded with higher occupancy, lower costs, and/or increased revenue. Some projects had a clear business plan for replacing PIPP funding by marketing their services or opening new lines of business. Primarily, leaders hoped that the emphasis on continual quality improvement, which emerged from participation, would create the momentum to sustain the project and perhaps even open up new areas for quality improvement. Also, they felt that investments in staff education or new technologies would continue to pay off beyond the project period. Despite their optimism, several project leaders regretted not putting more effort into planning for sustainability when selecting and designing their projects.

**Successes and Administrative Challenges**

Through the PIPP, Minnesota has gained important information about successes and administrative challenges involved in nursing facility pay for performance. The large number of participating facilities and positive statements about PIPP by trade associations and facility staff indicate industry interest in and support for the program. An analysis of performance data for the 20 projects in Round 1 indicated that 8 met all established targets, 10 met one or more of their stated targets, 1 facility suspended its project before completion, and 1 facility met no targets. Success rates varied by type of project and performance measures targeted by the intervention. For example, three facilities implemented safe patient handling projects with two of the facilities achieving considerable reductions in worker injuries. The third facility did not achieve any improvement in worker injuries. Three projects were focused on pain reduction and improved physical functioning. They employed varied strategies including an exercise program, enhanced pain assessment and staff education, and utilization of electrotherapy equipment. Results were also mixed with considerable improvement in quality of life reported from those participating in the exercise program and less decline in physical functioning, whereas at the same time the project did not achieve notable improvement in functioning on average across all participants. Enhanced pain assessment and staff education did result in reduced pain reported but it did not reduce reported pain interference in daily activities. Utilization of electrotherapy technology resulted in reduced length of stay for orthopedic patients, reduced pain for short-stay residents, and improved physical functioning. Two projects, tele-home monitoring and resident and family education on successful community transition strategies resulted in reduced facility to hospital readmission rates and average length of stay in the nursing home. Progress reports from Round 2 facilities have shown promising trends.

There have also been challenges. Unlike pay-for-performance programs that distribute funds for all facilities reaching a quality measure target without considering the processes used, the PIPP is administratively complex. The contracting process is involved, requiring time and knowledge of nursing facility quality improvement on the part of program administrative staff. Facility leadership experience with quality improvement can be highly variable and those with less familiarity with the concepts and measures used require particular assistance. Finally, the characteristics of participating facilities support the need to expand PIPP beyond innovators and early adopters, a goal addressed in part by proposal writing and project planning educational opportunities described in the following section.

**Continuous Program Improvement**

Lessons learned from the program have resulted in a number of enhancements. First, almost all projects now use Minnesota Nursing Home Report Card outcome measures to improve data integrity, ease of data management for facilities, and the ability to evaluate overall program effectiveness. Second, DHS encourages facility collaboration for economies of scale, greater efficiency, and opportunities to share clinical expertise, training, data collection costs, and so forth. Third, the RFP for each successive round is revised to capture lessons learned from each preceding round. Fourth, DHS and the Minnesota Area Geriatric Education Center (MAGEC) offer educational sessions for facility staff focusing on proposal writing, quality improvement strategies, sustainability of results beyond the end of funding, and the opportunity for facilities to share successful strategies. Finally, MAGEC created
a 2009 Educational Fellowship Program that provides guidance to participants in choosing topics for improvement projects and project design, introduces the various tools, data sources, and data collection needed for improving performance, promotes engaged leadership, and assists in implementation planning and evaluation.

Although our preliminary findings show promising results, we are mindful of the need for a thorough evaluation. We are planning a statewide facility survey, organizational case studies, and a cost and quality trend analysis to better understand (a) why facilities achieve funding and carry out successful projects; (b) identify factors leading to project sustainability; and (c) assess whether the PIPP is meeting the state policy goals of improved long-term care quality, effectiveness, and efficiency.

Conclusions

With its emphasis on implementation of evidence-based care practice through locally developed solutions, innovation, and collaboration, the PIPP departs from conventional top-down approaches to nursing home quality. The mixed track record of pay for performance in various health care settings highlights the need for such programs to go beyond simply offering payment incentives to providers for better care. Pay-for-performance systems should foster provider-initiated quality improvement strategies, help providers to equip themselves with the tools for improving their performance, and promote sustainable efforts to produce better care. Although PIPP funding is a substantial public investment, it represents only 1.5% of annual nursing home expenditures. Grantees have faced challenges as well as successes that have extended beyond individual projects to the organization as a whole. The PIPP can be a model for other states seeking to promote nursing home quality either in combination or in place of conventional pay-for-performance efforts.

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