

Improving Nursing Facility Care Through an Innovative Payment Demonstration Project: Optimizing Patient Transfers, Impacting Medical Quality, and Improving Symptoms: Transforming Institutional Care Phase 2

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Optimizing Patient Transfers, Impacting Medical Quality, and Improving Symptoms: Transforming Institutional Care (OPTIMISTIC) is a 2-phase Center for Medicare and Medicaid Innovations demonstration project now testing a novel Medicare Part B payment model for nursing facilities and practitioners in 40 Indiana nursing facilities. The new payment codes are intended to promote high-quality care in place for acutely ill long-stay residents. The focus of the initiative is to reduce hospitalizations through the diagnosis and on-site management of 6 common acute clinical conditions (linked to a majority of potentially avoidable hospitalizations of nursing facility residents¹): pneumonia, urinary tract infection, skin infection, heart failure, chronic obstructive pulmonary disease or asthma, and dehydration. This article describes the OPTIMISTIC Phase 2 model design, nursing facility and practitioner recruitment and training, and early experiences implementing new Medicare payment codes for nursing facilities and practitioners. Lessons learned from the OPTIMISTIC experience may be useful to others engaged in multicomponent quality improvement initiatives. *J Am Geriatr Soc* 66:1625–1631, 2018.

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Unnecessary hospitalizations are burdensome for nursing facility residents and expensive for the healthcare system. The Centers for Medicare and Medicaid Services (CMS) reported that approximately 45% of hospital admissions of long-stay nursing facility residents covered by Medicare and Medicaid were potentially avoidable, costing Medicare \$2.6 billion in 2005²; another study using 2006–08 data found that three-fifths of hospitalizations of long-stay nursing home residents were potentially avoidable.³ Proactive detection of symptoms and changes in residents and interventions and enhanced resources may prevent many unnecessary or inappropriate hospitalizations.^{4,5}

The CMS Center for Innovations and CMS Medicare-Medicaid Coordination Office funded multisite demonstration projects designed to improve care of long-stay nursing facility residents and reduce potentially avoidable hospitalizations by increasing resources and education activities in participating facilities. Each site developed its own intervention based on broad parameters that CMS set. The Indiana University Optimizing Patient Transfers, Impacting Medical Quality and Improving Symptoms: Transforming Institutional Care (OPTIMISTIC) Project was one of 7 sites participating in the Initiative to Reduce Avoidable Hospitalizations Among Nursing Facility Residents Phase 1 (October 2012 to September 2016)⁶. The OPTIMISTIC clinical model developed in Phase 1 and continued in Phase 2 embeds a specially trained registered nurse (RN) in participating nursing facilities with support from nurse practitioners (NPs). The components of the

OPTIMISTIC clinical model incorporate elements of existing programs, such as Interventions to Reduce Acute Care Transfers (INTERACT)⁴ and Respecting Choices Last Steps⁷, and newly developed tools and strategies,^{8,9} with the goal of safely reducing potentially avoidable hospitalizations of long-stay nursing facility residents. In the final evaluation of Phase 1, OPTIMISTIC facilities experienced 19% fewer all-cause hospitalizations and 33% fewer potentially avoidable hospitalizations than control facilities.^{5,6}

Building on the findings of OPTIMISTIC and the other sites engaged in Phase 1 projects, CMS funded a second round of demonstration projects (April 2016 to September 2020). OPTIMISTIC is 1 of the 6 original sites participating in Phase 2¹. Phase 2 included recruitment of additional nursing facilities at each demonstration project site to test a payment model centered on new Medicare Part B billing codes for nursing facilities and practitioners, which only participants in the demonstration projects may use. Through the use of new codes, Medicare provides reimbursement for treatment of residents who experience acute changes in condition related to 6 common medical conditions¹. Nursing facilities use these new codes to bill Medicare for the higher level of care provided during an episode of acute illness in addition to their usual payments (from Medicaid or other sources) for care, room, and board. There are also codes for practitioners (physicians, nurse practitioners, physician assistants) to bill for a care coordination visit or bill at a higher rate for an initial assessment visit for residents who have experienced a change in condition. The original nursing facilities who participated in OPTIMISTIC Phase 1 continued their participation in Phase 2 of the demonstration project. These facilities maintain the clinical care model developed in Phase 1 that OPTIMISTIC RNs and NPs delivered, in addition to accessing the novel facility and provider billing codes. A second group of Indiana facilities was recruited for participation in the Phase 2 payment-only model arm of the demonstration.

These CMS demonstration projects represent a large federal investment in exploring clinical enhancement and payment approaches to improving care of nursing facility residents and reducing avoidable hospital transfers. The purpose of this article is to describe the OPTIMISTIC approach to implementing this novel payment model in 40 nursing facilities, the process of nursing facility and practitioner recruitment and training, and early experiences in the use of novel CMS payment codes for nursing facilities and practitioners.

Structure of the Phase 2 Nursing Facility Initiative Demonstration Project

Facilities in the demonstration project can bill for higher level of care provided to residents who have been in the facility for longer than 100 days, have Medicare that is not a Medicare managed care plan, and are not on hospice. All eligible residents in participating nursing facilities are notified of the project and have the option to opt out. In the first 9 months of the Phase 2 initiative, 25 residents had opted out, accounting for only 1% of the total eligible population. If a resident is receiving the Medicare post-acute

care benefit for skilled nursing facility care, the acute care episode codes cannot be billed for the same days.

CMS chose 6 clinical conditions associated with potentially avoidable hospitalizations as the focus for Phase 2¹ based on research suggesting that these conditions are linked to approximately 80% of potentially avoidable hospitalizations of long-stay nursing facility residents¹⁰: pneumonia, dehydration, congestive heart failure (CHF), urinary tract infection (UTI), skin infection, and chronic obstructive pulmonary disease (COPD) or asthma.

For a facility to bill for an episode of care associated with one of these conditions, the facility must identify and document that the resident had a change in status, have a medical practitioner perform and document an in-person or telemedicine assessment within 2 days of the resident's change in status, and document the higher level of care provided to the resident during the billing period. For a resident to be certified as having 1 of 6 conditions, specific clinical criteria must be met, and the practitioner who assesses the resident must document them (Figure 1).

Facilities can bill for episodes of up to 7 days for residents with pneumonia, CHF, UTI, skin infection, or COPD or asthma. Facilities can bill for up to 5 days of enhanced care for residents with dehydration. If a resident dies or is transferred to the hospital during an acute care episode, the facility may still bill for care provided for the days leading up to the death or transfer. If a resident remains ill after the initial billing period for facility care, a practitioner may perform another in-person assessment and recertify for another episode, which may be continuous with the first. During the acute care episode, nursing facilities receive a daily Medicare payment in addition to payments they receive from Medicaid or other payors for daily care, room, and board (\$218, with some regional variation in rates). These payments can be used to cover the expense of enhanced care provided during these episodes (additional staff time) and support the purchase of additional in-house resources such as bladder scanners and blood pressure cuffs.

Physicians, NPs, and physician assistants in participating facilities have the opportunity to bill the new Medicare Part B codes for the care that they provide to residents. When 1 of the 6 conditions is suspected, the practitioner can bill a code for the initial visit that is reimbursed at an enhanced rate (\$205, with some regional variation), similar to the initial visit rate for a hospitalized resident (as opposed to the lower-reimbursed subsequent visit codes used in usual practice). A new code for Care Coordination and Caregiver Engagement was created that practitioners may bill annually or if nursing facility staff complete a Minimum Data Set (MDS) Significant Change in Condition assessment. This code (approximately \$76) requires 25 minutes of face-to-face time, no physical examination can be performed, and a member of the interdisciplinary care team must be present. All of these codes may be billed only for eligible residents in facilities participating in the demonstration project.

Recruitment and orientation of nursing facilities and practitioners

The Indiana University OPTIMISTIC project team was awarded a contract in April 2016 with a target Phase 2

Acute Condition	Qualifying Diagnosis Criteria
<p>Pneumonia (up to 7 days)</p>	<p>One or more of the following:</p> <ul style="list-style-type: none"> • CXR confirmation of a <i>new</i> pulmonary infiltrate <p>OR Two or more of the following:</p> <ul style="list-style-type: none"> • Fever > 100°F (oral) or ≥ 2° above baseline • Oxygen saturation < 92% on room air or on patient’s usual oxygen settings if chronic oxygen requirements • Respiratory rate > 24 breaths/minute • Evidence of focal pulmonary consolidation on exam (rales, rhonchi, decreased breath sounds, or dullness to percussion)
<p>CHF exacerbation (up to 7 days)</p>	<p>One or more of the following:</p> <ul style="list-style-type: none"> • CXR confirmation of <i>new</i> pulmonary congestion <p>OR Two or more of the following:</p> <ul style="list-style-type: none"> • Oxygen saturation < 92% on room air or on patient’s usual oxygen settings if chronic oxygen requirements • New or worsening pulmonary rales • New or worsening edema • New or increased jugulo-venous distension • BNP > 300 pg/mL
<p>Skin Infection (up to 7 days)</p>	<ul style="list-style-type: none"> • New onset painful, <i>warm and/or swollen</i>/indurated skin infection requiring oral or parenteral antibiotic treatment • If associated with skin ulcer or wound, there is an acute change in condition with signs of infection including purulence, exudate, fever exceeding 100°F, new onset of pain, and/or induration
<p>Fluid/ Electrolyte Disorder or Dehydration (up to 5 days)</p>	<p>MUST have:</p> <ul style="list-style-type: none"> • ANY acute change in condition <p>AND Two or more of the following:</p> <ul style="list-style-type: none"> • Reduced urine output in 24 hours OR reduced oral intake by ≥ 25% of average intake over 3 consecutive days • New onset systolic BP ≤ 100 mmHg (lying, sitting or standing) • 20% increase in Blood Urea Nitrogen (BUN)—e.g. from 20 to 24 <u>OR</u> 20% increase in Creatinine—e.g. from 1.0 to 1.2 • Sodium ≥ 145 or < 135 • Orthostatic drop in systolic BP of ≥ 20 mmHg going from supine to sitting or standing
<p>COPD/Asthma Exacerbation (up to 7 days)</p>	<p>MUST have:</p> <ul style="list-style-type: none"> • Known dx of COPD/asthma OR CXR showing COPD with hyperinflated lungs and no infiltrates <p>AND Two or more of the following:</p> <ul style="list-style-type: none"> • Symptoms: wheezing, shortness of breath, or increased sputum production • Oxygen saturation < 92% on room air or on patient’s usual oxygen settings if chronic oxygen requirements • Acute reduction in Peak Flow or FEV1 on spirometry • Respiratory rate > 24 breaths/minute
<p>Urinary Tract Infection (up to 7 days)</p>	<p>MUST have:</p> <ul style="list-style-type: none"> • >100,000 colonies of bacteria growing in urine with no more than 2 different species (can certify pending results) <p>AND One or more of the following:</p> <ul style="list-style-type: none"> • Fever > 100°F (oral) or ≥ 2° above baseline • Peripheral WBC count > 14,000 • Symptoms: dysuria, new or increased urinary frequency, new or increased urinary incontinence, altered mental status, gross hematuria, or acute costovertebral angle pain/tenderness

Figure 1. Payment demonstration model clinical conditions and diagnostic criteria.

launch date of October 2016. At the time of the award, CMS provided a list of nursing facilities in Indiana potentially eligible for inclusion (met baseline criteria set by CMS, including an overall star quality rating of ≥3, average total census of 80 residents for all facilities, more than 40% of residents are long stay and not in Medicare managed care plans, no recent deficiencies or evidence of Medicare fraud). The OPTIMISTIC project team advertised the opportunity to participate in Phase 2 to facilities throughout the state and contacted Phase 1 nursing facility partners and facilities that CMS identified. Phase 1 facilities were concentrated in central Indiana; facilities added for Phase 2 were recruited across the state.

An introductory e-mail and project fact sheet were sent to invite facilities to participate in webinars designed to provide information about the opportunity and instructions about the application process. The application required a signed memorandum of understanding

indicating willingness to meet program requirements, signed letters of intent from eligible facility practitioners, detailed facility and census information, and information about the facility’s capacity to meet program clinical requirements. (See Table 1 for clinical capability requirements.) At the conclusion of the enrollment period, Indiana University received complete applications from 55 new facilities and all 19 facilities that had participated in the Phase 1 clinical demonstration. CMS made the final determination of the 44 nursing facilities selected for participation (~9% of all Indiana nursing facilities).

To participate in Phase 2, facilities were required to demonstrate that they had tools, processes, and services (Table 1) in place to provide the enhanced care required to treat acute illness in place and commit to submitting data to OPTIMISTIC to meet CMS data reporting requirements. The OPTIMISTIC project team worked closely with the 19 nursing partners from the Phase 1 program to

Table 1. Nursing Home Clinical Capability Requirements for Phase 2**Treatment Capability Criteria**

24-hour availability by facility staff and attending practitioners
Ability of a certified staff member on all units to start and maintain parenteral medications and fluids 24 hours a day for eligible beneficiaries
Ability to address complex wounds through debridement, high-frequency dressing changes, cleansing, and antibiotics
Ability to furnish respiratory and bronchodilator therapy and oxygen 24 hours a day
Ability to furnish electrocardiographs and access to a clinician to read and interpret electrocardiographs within 4 hours
Implementation and use of structured tool to document and communicate resident changes in condition, including hospital transfers
Information and specification of telemedicine system if applicable
Information and specifications related to health information technology used to support assessments, care planning, and health information exchange at times of transitions in care

ensure their ability to meet readiness, including in-person meetings. The CMS-funded operations and support contractor conducted onsite reviews with approximately 20% of the selected facilities; all other facilities completed a telephone interview to assess readiness for participation.

Nursing facilities were also required to obtain a signed letter of intent from practitioners who were interested in billing the new codes and met the eligibility criteria to participate. Practitioners had to have a minimum of 7 long-stay residents in the facility and be Medicare-certified providers in good standing. CMS then approved practitioners. As of June 2017, 148 practitioners had been vetted and approved.

OPTIMISTIC facilities who participated in Phase 1 were able to retain the full clinical model of Phase 1, including embedded RNs and NPs, in addition to billing for higher levels of care. In preparation for Phase 2, the OPTIMISTIC RNs and NPs underwent additional training on identification and treatment of the 6 clinical conditions specific to this phase of the demonstration.

In late September 2016, 44 facilities (19 from Phase 1, 25 new for Phase 2) were invited to attend the OPTIMISTIC Stakeholder Summit, a day-long meeting that provided training and information about the launch of the Phase 2 demonstration. All nursing facilities successfully completed the readiness review process before the “go live” date of October 1, 2016. Within the first few months of the initiative, 4 facilities (2 payment-only facilities, 2 clinical + payment facilities) elected to withdraw their commitment in the initiative without billing.

Data collection, evaluation, and monitoring

The OPTIMISTIC team is required to submit quarterly data to CMS. For OPTIMISTIC, all participating facilities transmit data through a secure REDCap¹¹ database hosted at Indiana University on administrative and clinical data specifications, including eligible residents, hospital

transfers, and acute care episodes billed. Facilities are subject to audit of episodes that Medicare contractors bill.

Facility and practitioner engagement

Learning communities were established as a required element in Phase 2 to deliver training and information to the nursing facility and practitioner partners and encourage experience sharing across the project. OPTIMISTIC developed 2 learning communities: 1 for the nursing facility leadership (operations) and 1 for clinical care providers, including nursing facility directors of nursing and practitioners. Clinical-plus-payment and payment-only facilities and providers were invited to participate in learning community events. To reduce travel burden on facility staff, learning communities were conducted by webinar once a month for the first 9 months. In the first 3 months, learning communities were set up in an “office hours” format with the project billing and data specialists available to disseminate new information and answer questions about the logistics of administering the project.

Similarly, the OPTIMISTIC medical director and project director facilitated practitioner-targeted clinical learning communities to answer clinical specific questions, including meeting criteria for certification. After the early months of implementation, learning communities focused each month on 1 of the 6 clinical conditions and on antibiotic stewardship.¹² Participants rated learning community webinars as useful, but they were overall inconsistently attended (an average of 10 participants on practitioner webinars, an average 16 participants on the operational focused webinars). Nursing facility leaders and practitioners have multiple competing priorities, and despite soliciting input, the project team found it difficult to identify days and times that were convenient for a majority to participate. All facility leadership, clinical leads, and practitioners were invited to the annual Stakeholder Seminar at the conclusion of the first year.

In addition to offering webinars, OPTIMISTIC project team staff maintain regular contact with facilities. The payment-only facilities receive a monthly survey and call; clinical-plus-payment facilities participate in quarterly in-person meetings. Some findings related to implementation challenges include identification of acute changes in status, lack of practitioner availability to conduct certification visits, need for more proactive communication between clinical care staff and practitioner of initial notice of change in condition, difficulty incorporating the new code into the billing system, changing nursing facility culture and practitioners’ willingness to treat in place, providing family education on benefits of treating acute illness in the nursing facility, and preparing required data submissions. Members of the project team are available to provide support on any aspect of the project, including in-person meetings at facilities to review available data on billing practices for acute care episodes.

Quarterly newsletters are distributed through e-mail to all stakeholders involved in the project. A project website is maintained that includes information and tools related to the initiative (optimistic-care.org). Quarterly advisory board meetings continue from Phase 1, which

Table 2. Facility Characteristics at Baseline

Characteristic	Clinical and Payment, n = 17	Payment Only, n = 23
Number of Medicare- and Medicaid-certified beds, average (range) ¹	141.8 (89–188)	136.3 (68–162)
Ownership, n (%) ¹		
For profit	4 (17.4)	2 (11.8)
Public	13 (56.5)	14 (82.3)
Nonprofit	6 (26.1)	1 (5.9)
Facilities in mostly rural ZIP codes, n (%) ²	0 (0)	4 (17.4)
Overall star rating, average ³	3.7	4.2
Providers in facility eligible to bill novel Medicare codes on October 1, 2016, average (range)	2.8 (1–6)	2.9 (1–6)
All-cause transfer rate of Optimizing Patient Transfers, Impacting Medical Quality, and Improving Symptoms: Transforming Institutional Care—eligible residents per 1,000 resident days, average ³	1.2	1.5
Cognitive Function Scale score, average (range) ⁴	2.1 (1.6–2.7)	2.1 (1.7–2.6)
Nonwhite residents, %, average (range) ⁴	29.0 (4.3–79.2)	6.3 (0–37.5)

¹Nursing Home Compare provider information archive for September 2016.

²2010 Census data.

³Obtained from first quarter metrics report from the Centers for Medicare and Medicaid Services published in the third quarter of 2017, average for October 1 to December 31, 2016.

⁴Calculated from Minimum Data Set as a mean of facility means, using closest comprehensive assessment to October 1, 2016.

include core stakeholders in long-term care from industry, advocacy, and government.

Early implementation of payment model

Of the 40 facilities that participated in the project in the first 9 months of implementation (October 2016 to June 2017), those in the clinical-plus-payment group had an average 142 beds, and those in the payment-only group had an average 136 beds (Table 2). At the launch of Phase 2, the average facility star rating was 3.76 in the clinical-plus-payment facilities and 4.17 in the payment-only facilities (out of 5)¹³. According to data that the facilities reported, in the first 9 months of implementation of the payment model, UTIs were the most commonly billed condition in both groups, with 445 submitted bills (Table 3). In contrast, acute change in condition from COPD was the least commonly billed condition in both groups, with 48 submitted bills. As of August 2017, 11 facilities had not reported billing any episodes; the highest user of the codes had billed for 108 episodes.

Continued refinement of the OPTIMISTIC clinical model

Evaluation of the Phase 1 CMS project demonstrated the success of the OPTIMISTIC clinical model in reducing all-cause and potentially avoidable hospitalizations of long-stay nursing facility residents. Ongoing OPTIMISTIC clinical staff training and new tool development reflect CMS's focus on the 6 clinical conditions commonly associated with avoidable transfers. Standardized protocols have been developed to support care of acutely ill residents. In addition, OPTIMISTIC clinical staff continue to champion use of INTERACT tools, advance care planning, and transition support, which are central to the OPTIMISTIC clinical model.

DISCUSSION

CMS is making a significant investment in exploring strategies to improve care of nursing facility residents through clinical and payment demonstration projects. In Phase 1, OPTIMISTIC built and maintained partnerships with 19 nursing facilities in central Indiana, successfully collaborating with industry to improve resident outcomes. Phase 2 builds on the success of Phase 1, aligning payment incentives by providing resources directly to nursing facilities and practitioners to care for sick residents in place. New challenges include recruiting and sustaining partnerships with 40 facilities spread across the state; training facility staff, leadership, and practitioners on how to use novel Medicare billing codes; and continuing to refine the OPTIMISTIC clinical model.

In the first several months of implementation, 3 facilities from the same company withdrew from the project after a prolonged ownership transition. One additional facility was terminated because it did not submit data; this independent facility cited lack of resources to meet the requirements of the project, including instituting processes to submit new billing codes, provide enhanced clinical care and documentation, and data submission. None of these facilities billed any of the payment codes.

Data on overall patterns of billing for the 6 conditions have been shared at OPTIMISTIC advisory board meetings and directly with facility leaders. These data have been well received and are critical for facilities to understand how their billing practices are similar to or different from those of others in the initiative. It also indicates that there is wide variability in how quickly a facility is able to adopt new billing codes, even with support. Those that have not billed at all have been unsuccessful at appropriately identifying eligible changes in condition and billing for them, but those that are billing less than others may also be missing opportunities to receive additional resources for care provided in the facility and may have higher rates of potentially avoidable hospital transfers as a result.

Table 3. Billed Change-in-Condition Episodes According to Facility Group: October 2016 to June 2017

Condition	Clinical and Payment, n = 17	Payment Only, n = 23	Overall, n = 40
Urinary tract infection			
Billed episodes, n	207	238	445
Episodes Billed per facility, average \pm SD (range), n	12.2 \pm 10.4 (0–42)	10.4 \pm 13.4 (0–43)	11.1 \pm 12.0 (0–43)
Length of episode, average \pm SD, days	6.0 \pm 2.3	5.6 \pm 1.8	5.8 \pm 2.0
Recertified continuous, overall, %	0	1	1
Episode ended with transfer to hospital, overall, n (%)	5 (2)	3 (1)	8 (2)
Pneumonia			
Billed episodes, n	188	211	399
Episodes Billed per facility, average \pm SD (range), n	11.1 \pm 6.7 (1–27)	9.2 \pm 13.4 (0–50)	10.0 \pm 10.6 (0–50)
Length of episode, average \pm SD, days	5.7 \pm 2.7	5.5 \pm 2.8	5.6 \pm 2.8
Recertified continuous, overall, %	0	1	1
Episode ended with transfer to hospital, overall, n (%)	4 (2)	8 (4)	12 (3)
Skin infection			
Billed episodes, n	126	101	227
Episodes Billed per facility, average \pm SD (range), n	7.4 \pm 3.3 (0–17)	4.4 \pm 6.6 (0–26)	5.7 \pm 5.4 (0–26)
Length of episode, average \pm SD, days	5.8 \pm 2.3	5.9 \pm 1.4	5.9 \pm 2.0
Recertified continuous, overall, %	2	5	3
Episode ended with transfer to hospital, overall, n (%)	1 (1)	0 (0)	1 (0)
Congestive heart failure			
Billed episodes, n	47	58	105
Episodes Billed per facility, average \pm SD (range), n	2.8 \pm 3.6 (0–12)	2.5 \pm 6.9 (0–26)	2.6 \pm 5.5 (0–26)
Length of episode, average \pm SD, days	5.5 \pm 2.16	6.38 \pm 2.85	5.97 \pm 2.59
Recertified continuous, overall, %	0	0	0
Episode ended with transfer to hospital, overall, n (%)	3 (6)	0 (0)	3 (3)
Dehydration			
Billed episodes, n	32	30	62
Episodes Billed per facility, average \pm SD (range), n	1.88 \pm 1.97 (0–7)	1.3 \pm 3.06 (0–11)	1.55 \pm 2.52 (0–11)
Length of episode, average \pm SD, days	4.16 \pm 1.22	7.11 \pm 17.51	5.53 \pm 12.07
Recertified continuous, overall, %	0	0	0
Episode ended with transfer to hospital, overall, n (%)	1 (3)	0 (0)	1 (2)
Chronic obstructive pulmonary disease			
Billed episodes, n	30	18	48
Episodes Billed per facility, average \pm SD (range), n	1.76 \pm 3.79 (0–14)	0.78 \pm 2.58 (0–8)	1.2 \pm 3.45 (0–14)
Length of episode, average \pm SD, days	9.31 \pm 17.81	6.06 \pm 1.11	8.02 \pm 13.96
Recertified continuous, overall, %	0	0	0
Episode ended with transfer to hospital, overall, n (%)	1 (3)	0 (0)	1 (2)
Total for all conditions			
Billed episodes, n	630	656	1286
Episodes Billed per facility, average \pm SD (range), n	37.06 \pm 23.42 (0–80)	32.80 \pm 34.79 (0–138)	34.76 \pm 30.18 (0–138)
Length of episode, average \pm SD, days	5.86 \pm 4.54	5.78 \pm 4.35	5.82 \pm 4.45
Recertified continuous, overall, %	0	2	1
Episode ended with transfer to hospital, overall, n (%)	15 (2)	11 (2)	26 (2)

Facilities self-report these data, which may differ from Medicare claims data; billing rates are not adjusted for number of facility residents. SD = standard deviation.

The OPTIMISTIC team continues to believe that there is no substitute for intensive, one-on-one support for successful implementation. There is a 4-person implementation team that serves as the primary liaison to the facilities and practitioners in the project.

Through participation in this initiative, facilities have access to new revenue intended to support identification and treatment of acute illness in place. Prevention of hospital transfers is encouraged; prevention of acute illness is not directly encouraged through this payment model. Before the start of the initiative, all facilities underwent review by CMS contractors to ensure that best practice clinical protocols were in place for prevention of infection, dehydration, and exacerbations of chronic disease. As reported, the most commonly billed codes are for UTI and pneumonia. The effect of access to these billing codes on

overall infection rates will be an important component of evaluation of the project. The evaluation will also indicate the net effect on Medicare costs to assess whether reductions in hospitalization and related costs off-set increased payments to nursing facilities and practitioners.

CONCLUSION

Potentially avoidable hospitalizations of nursing facility residents have been recognized as an example of waste in the healthcare system and a disservice to this frail population and their families. In response to this recognition, increased expectations regarding reducing readmissions from health system partners and initiatives such as these demonstration projects have resulted in dramatic progress¹⁴. Phase 2 of the Nursing Facility Initiative provides an important opportunity

to test whether an increase in resources to facilities and practitioners can further reduce avoidable hospitalizations. Running a complex demonstration project requires sophisticated staff and strong stakeholder partnerships, as well as the ability to adapt strategies based on data. OPTIMISTIC Phase 1 demonstrated that an enhanced clinical care model in nursing facilities improved critical outcomes; Phase 2 builds on this platform to further refine the clinical model and support implementation of novel billing codes to support in-house care of nursing facility residents. The lessons learned from the OPTIMISTIC experience may be useful to others engaged in multicomponent quality improvement initiatives, including successes and limitations of communications within a large network, the importance of using data to target activities, and understanding the level of support needed to support implementation.

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