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THE INTERSECTION OF HOME-BASED CARE INNOVATION AND IMPLEMENTATION

Health care reform initiatives continue to drive changes in delivery and payment models. These changes, aligned with the Triple Aim, seek to improve health outcomes, increase patient satisfaction, and reduce health care costs. Quality measures have been developed and implemented across all health care delivery sectors to measure the march toward these improvement goals.

Key among these initiatives is a rapid movement away from traditional fee-for-service (FFS) payments for health care services toward value-based reimbursement models that base some or all of a provider’s payment on performance goals and outcomes. In January 2015, the U.S. Department of Health and Human Services (HHS) set goals for more aggressively shifting the Medicare program from a volume-based to a value-based payer. These goals seek to align 85 percent of Medicare FFS payments to performance-based payment models at the end of 2016, expanding to 90 percent by 2018. HHS also announced plans to transition at least 30 percent of FFS payments to alternative payment models, such as shared savings and bundles, at the end of 2016, and at least 50 percent by the end of 2018. HHS has also asked state Medicaid programs, commercial insurers, and other payers to align their targets for value-based payment with these Medicare program goals.

Providers in all sectors of health care delivery are adjusting to this new quality and outcome-focused payment environment through engagement in new delivery and payment models, including both traditional FFS and managed care, across Medicare and Medicaid. For example, a growing number of VNAA members are engaged in a variety of alternative payment and delivery programs, including Medicaid Managed Long Term Care (MLTC), Center for Medicare and Medicaid Innovation (CMMI) Model Three Bundled Payments for Care Improvement (BPCI), Accountable Care Organizations (ACOs), and CMMI Innovation Grant demonstrations merging technology and care coordination. These agencies and others are also finding that success in these new models and programs is driven by—and reliant upon—availability and analysis of agency and patient data, as well as health information technology.

Many other agencies across the country, however, are just beginning the transition to value-based care and reimbursement. This is not to imply that these agencies are not already providing high value care, but that they have confronted numerous barriers to rapid and successful partnership and engagement in value-based models. Key among these challenges are the presence of willing payers and provider partners in their communities; the availability of adequate financial resources for independent investment in new programs or technologies; staffing shortages across all positions; data access and actionability challenges; and increasing regulatory burdens and reimbursement reductions.

VNAA’s vision is to transform home-based care for providers and populations across communities. We seek to achieve this vision by advancing quality improvements, demonstrating value, and driving innovation in home-based care. Successful participation in a value-based health economy will be critical to the success of current and future home-based care providers. The case studies contained in this compendium are intended to highlight leadership and success in the transformation of our industry, and can serve as a guide for agencies seeking strategic and tactical guidance on new programs and partnerships.

The 2017 VNAA Case Study Compendium highlights innovations designed and implemented by VNAA member agencies. The Compendium is indexed by five key themes in areas where agencies can significantly impact successful improvement and outcomes for both their agencies and the patients they serve, as well as areas of focus in the broader health care marketplace. These themes are:

- Bundles/Financing (including both orthopedic and cardiac case studies)
- Care Coordination
- CMS Demonstrations
- Team
- Technology

VNAA welcomes additional case studies from home-based care providers. The VNAA Case Study Compendium and searchable database are regularly updated to serve as a tool and resource to all stakeholders in home-based care. We welcome your feedback and input to support transformation and innovation.

Regards,

Tracey Moorhead
President and CEO
Visiting Nurse Associations of America
February 2017
ACKNOWLEDGEMENTS

This Compendium was developed and written by Joy Cameron, Vice President, Policy and Innovation, Eileen Grande, Senior Director, External Affairs, and Visiting Nurse Associations of America (VNAA). Information contained in the report was gathered from survey data and written materials. VNAA is grateful to the home-based care providers and agency leaders that provided new information on their programs and supported the development of this report. VNAA further appreciates the agencies whose innovative programs were again featured in this edition.

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INTRODUCTION AND CASE STUDY KEY

The 2017 VNAA Case Study Compendium highlights innovative health care delivery and payment model programs spearheaded by VNAA member agencies and corporate partners. These case studies are intended to serve as a tool for agencies to benchmark progress toward engagement in new care delivery and payment models utilized in a value-based health care economy. The case studies can also serve as a useful tool for agencies to identify new potential programs for development and implementation.

The 2017 VNAA Case Study Compendium is indexed by five key themes:

**BUNDLES / FINANCING**
These case studies explore alternative payment models including value-based purchasing, accountable care organizations (ACOs), Medicare Advantage, Medicaid managed care, and examples of cardiac and orthopedic best practices that could prove helpful in those bundles.

**CARE COORDINATION**
These case studies highlight care coordination models that improve transitions, improve the overall quality of patient care and, in many cases, incorporate new technologies in care.

**CMS DEMONSTRATION**
These case studies highlight home-based care agency participation in demonstration and pilot programs launched by the U.S. Department of Health and Human Services, Center for Medicare and Medicaid Services Innovation Center (CMMI).

**TEAM**
These case studies highlight training, recruitment and retention, and alignment for better quality and care.

**TECHNOLOGY**
These case studies highlight the implementation and utilization of new health care technologies that help target improvement in health outcomes, quality of care, and ease of care for the betterment of patients, staff, and agencies.
MEDICATION RECONCILIATION AND CARE COORDINATION

AGENCY:
Concord Regional Visiting Nurse Association in Concord, New Hampshire.

AGENCY DESCRIPTION:
Concord Regional Visiting Nurse Association (VNA) is a not-for-profit, community-based health care provider that serves people of all ages in central New Hampshire. Services provided include home care, hospice, personal home services, maternal and child health services, pediatrics, and community health services.

GOAL OF PROJECT:
Reduce hospitalizations for Medicare patients with multiple chronic conditions and multiple medications.

POPULATION IMPACTED:
Those impacted by this project include Medicare beneficiaries, people who have chronic health conditions and multiple barriers, including polypharmacy and limited support systems, and multiple providers of care (primary care providers and subspecialists).

STRATEGIC PARTNERS:
Concord Regional VNA worked with Dartmouth-Hitchcock Concord physicians and additional clinical staff. Dartmouth-Hitchcock screens patients for inclusion in the program and works with the Concord Regional VNA’s Nursing Care Coordinator to reconcile medications and coordinate care through both electronic communications and face-to-face meetings.

PROJECT DESCRIPTION:
In January 2012, Dartmouth-Hitchcock Medical Center was named a Pioneer ACO. Concord Regional VNA was exploring options to integrate the agency into a Medical Home Model to better serve Medicare beneficiaries who are at high risk of being rehospitalized. In this program, rehospitalization is defined as when a patient is admitted back into the hospital within 30 days of the initial hospitalization for the same illness. Concord Regional VNA’s Home Health Nursing Care Coordinator consulted with three Dartmouth-Hitchcock Medical Center Primary Care Providers (PCPs) to form a pilot group. The pilot group began to study Dartmouth-Hitchcock’s patient population and identified the need for medication reconciliation. Clinical support was requested and the group developed methods to capture critical data needed to best serve patients.

A pilot study started and developed a scope of service. The pilot has since expanded to include Dartmouth-Hitchcock Concord PCPs. Dartmouth-Hitchcock withdrew from the Pioneer ACO model and is now a Next Generation ACO.

RESULTS:
The results of this study found that measures of success included improved patient education and enhanced relationships with providers regarding post-acute care. Concord Regional VNA and the PCPs shared information about patients and also quality metrics utilizing information technology, which allowed access to each organization’s records. This data sharing and technology allowed providers to improve care and communication.

OUTCOME MEASURES:
During the first year of the project, Concord Regional VNA served 204 patients and made significant changes to quality reporting. The measures Concord Regional VNA reviews include patient satisfaction survey results, readmission rates, emergent care rates, reduction in medication errors during transitions of care, and the OBQI score for improvement in medication management. Concord Regional VNA created a note to track specific medication issues found during the medication reconciliation visit and interventions completed by the clinician. For this patient population, the rehospitalization rate was reduced from 27 percent to 24 percent. Other metrics addressed were: 1) Patient ability to take oral medications correctly increased from 38 percent to 58 percent, and 2) Patient satisfaction on specific care issues increased from 81 percent to 87 percent.

BARRIERS TO IMPLEMENTATION:
Concord Regional VNA encountered many barriers to successful implementation of the program. These included lack of communication, both between patients and providers, as well as electronic medical records incompatibility. Regulatory compliance issues also created barriers. Concord Regional VNA does not bill the medication reconciliation visit but needed to understand the scope of the visit from a nursing practice scope perspective. The nurse does not perform any hands-on care other than the medication reconciliation and assessment of the environment during the visit. If the nurse identifies a need and home care is not already ordered, then the clinician requests a home care referral. Concord Regional VNA did not receive or secure any grants to fund this project. Lack of funding restricted some program aspects. Finally, patient refusal of care was a huge barrier to complete this project. Patients refused care primarily because they did not feel they needed a visit. Concord Regional VNA experienced an increase in compliance when the physician practice called the patient and told them that their “physician ordered” the visit.
AGENCY:
WellSpan Visiting Nurse Association in York, Pennsylvania.

AGENCY DESCRIPTION:
For more than 100 years, WellSpan VNA has served the eastern Pennsylvania population. It is understood that the best place to treat the body is where the heart is—at home. Often when patients are recovering from an illness or accident, are disabled, have a chronic illness, or are terminally ill, they do not need to be hospitalized, but do need health care assistance. The Community Services program enables clients to remain at home, maintaining the quality of life with which they are accustomed to living. Private duty services are customized to fulfill the patient’s individual home care needs, including assistance with daily living, assistance with personal care, meal preparation, light housekeeping, and respite care.

POPULATION IMPACTED:
All at-risk patients.

STRATEGIC PARTNERS:
Critical Signal Technologies (CST). CST provides the technology and call center support. Further information on CST can be found at http://www.criticalsignaltechnologies.com/

PROJECT DESCRIPTION:
Beginning on March 1, 2013, all WellSpan VNA patients now receive a “nurse call button” that they are instructed to “push for any reason.” When the button is pushed, a call center contact the patient asking how they can assist. Services include reviewing discharge orders, arranging for groceries to be delivered, and providing a medication reminder. The call center will also contact the doctor for a new appointment on behalf of the patient. The call center provides virtually anything the patient needs. The goal is to provide discharge security in the home upon admission to home health. All patients receive the button for the first 60 days after hospital discharge with the option to extend the service.

RESULTS:
To date, we have seen strong service improvement and lower rehospitalization rates. Thus far, 105 high-risk patients avoided the emergency department because of intervention.

OUTCOME MEASURES:
To date, the average patient pushes the button 3.4 times within the first 60 days of the service. The acute care hospitalization metric was reduced by four percent. However, it is unclear if this is just the patients who have call buttons. It is difficult to determine if the reduction was caused by the call button or by nursing intervention. The organization is currently examining the results of WellSpan At Home (WAH) patients and non-WAH patients.

BARRIERS TO IMPLEMENTATION:
There were some technical issues with devices in the home and language barrier issues. CST would not have the exact language interpreter available when needed.
TELEHEALTH INITIATIVE: A PARTNERSHIP BETWEEN TWO HEALTH CARE ORGANIZATIONS

AGENCY:
Visiting Nurse Association of Somerset Hill, Basking Ridge, New Jersey.

AGENCY DESCRIPTION:
The Visiting Nurse Association of Somerset Hills (VNASH) is a non-profit organization, founded more than a century ago, providing home and community health services to the residents of Morris and Somerset counties. It is accredited by the Community Health Accreditation Program (CHAP), certified by Medicare and licensed by the New Jersey Department of Health and Senior Services.

The VNASH’s mission is to provide individuals and families with comprehensive, high quality, cost-effective home and community health care services, regardless of ability to pay, using partnerships where appropriate. This mission is carried out through the delivery of a variety of services, including home health care, hospice, adult day care, and community health programs developed over a century of service.

POPULATION IMPACTED:
The population impacted by this project were Summit Medical Group (SMG) outpatients with congestive heart failure (CHF) or chronic obstructive pulmonary disorder (COPD), determined “at risk” for hospitalization. These patients resided in the central New Jersey area and were able to use a telehealth monitor with or without caregiver assistance. Other criteria included: 1) CHF patients admitted to a hospital or Urgent Care Center (UCC) within the past 12 months and on a loop diuretic, or 2) COPD patients admitted to a hospital or UCC within 12 months and on home oxygen, or 3) SMG physician endorsed and provided patient-specific standing orders.

STRATEGIC PARTNERS:
Summit Medical Group (SMG) is the largest and oldest physician-owned multi-specialty practice in New Jersey. In addition to the main campus, SMG has satellite offices in five counties and employs more than 325 clinicians and 1,500 staff addressing 76 medical specialties and services. SMG first opened its doors 85 years ago to focus on a patient-centered approach to care. Funding was provided by SMG in the form of a monthly management fee and equipment rental fee consistent with services rendered and the equipment being provided.

PROJECT DESCRIPTION:
VNASH partnered with SMG to reduce hospitalizations and emergency department visits, improve quality of care, improve coordination and transitions of care, increase patient self-management skills, reduce overall health care costs, and provide an alternate revenue stream for the home care agency. Twenty-four heart failure and three COPD patients were admitted to the joint telehealth program. The program included 90 days of daily monitoring and education modules. Clients were instructed in the use of a “zone” tool to identify symptom severity and report to the same telehealth nurse. Standing orders set frequent communication between the telehealth nurse and advanced practice nurses employed by the practice, allowing for proactive outreach and early intervention for symptomatic patients. Twenty-two patients completed the program. Retrospective chart reviews were used to compare previous hospitalization rates with program rates at 30, 60, and 90 days. Additionally, participants completed a satisfaction survey, which included questions regarding the ability to self-manage their disease.

RESULTS:
The year-long project yielded zero 30-day readmissions for these patients and high patient satisfaction. A conservative estimate of $10,000 per hospital admission demonstrates significant health care cost savings.

OUTCOME MEASURES:
The impact of this project was that the number of hospitalizations decreased when comparing hospitalizations pre-and post-intervention. The VNASH/SMG Telehealth Program had no hospital admissions within 30 days for the entire year-long program. When looking at all patients who completed three months on the program, there were 20 admits pre-intervention and four post-intervention; at six months (for all patients who completed six months post intervention) there were 28 admits pre-intervention and 12 post-intervention; at 12 months (for all patients who completed 12 months post-intervention) there were 20 admits pre-intervention and six post-intervention. There were zero hospital admissions within the period of 31 to 60 days on the program, and one admission in the period of 61 to 90 days on the program.

Fifty percent of patients in the program demonstrated improvement in their ability to manage self-care. In addition, 21 patients completed the final satisfaction survey, and 91 percent of the patients strongly agreed or agreed that “Overall, I was satisfied with the telehealth program.” The other two patients answered neutral on this question. Potential cost saving estimated annually, using the Center for Medicare and Medicaid Services (CMS) average costs per hospitalization of potentially avoidable hospitalizations for 12 months totaled $109,844.

BARRIERS TO IMPLEMENTATION:
There were many barriers to the successful implementation of this program. The first barrier was the small study sample size due to limited and inappropriate referrals. Another barrier was the need for increased marketing to physicians and patients to help drive enrollment in the program. In addition, the selection criteria excluded patients expected to have limited benefit from the program based on multiple co-morbidities. Lastly, patient activation measurement/satisfaction tools did not allow patients to answer surveys anonymously.
INDEPENDENCE AT HOME

AGENCY:
Christiana Care Visiting Nurse Association in New Castle, Delaware.

AGENCY DESCRIPTION:
Christiana Care Visiting Nurse Association (VNA) is a full-service home health agency and a wholly-owned subsidiary of the Christiana Care Health System in Delaware. Average daily census is approximately 1,600 and approximate annual revenue is $45 million. The Home Visiting Provider Program is included as a component of the Christiana Care Quality Partners ACO.

DEMONSTRATION:
This is part of the Center for Medicare and Medicaid Services (CMS) Independence at Home Demonstration project. This project is authorized under section 3024 of the Affordable Care Act.

POPULATION IMPACTED:
Frail elderly patients residing in the greater Wilmington area.

STRATEGIC PARTNERS:
Close collaboration with the system’s physician home visit program, community hospice providers, community PCPs and specialist practices, community hospitals, and numerous other community-based services.

PROJECT DESCRIPTION:
Christiana Care VNA has completed the first three years of a five-year “gain sharing” model. Much of the focus has been in recruiting and enrolling the required number of patients to meet the CMS-required level of 200 patients. Christiana Care has focused efforts on the five key quality indicators that are required as part of this project. Finally, Christiana Care’s focus has been on integrating the efforts of its home physician visit program and VNA care to optimize quality, patient experience, and the impact on reducing overall costs of care by reducing avoidable readmissions and other non-value added services.

RESULTS:
Results will be tracked over the next two years and will include the numbers of patients, key quality indicators, and various other quality indicators and costs of care. The Independence at Home demonstration was extended by Congress in 2015.

OUTCOME MEASURES:
As of the first year, Christiana Care VNA has seen an approximate 20 percent reduction in the rate of hospitalization of patients enrolled in the program. CMS is analyzing results and will share the first three years worth of data in the Spring of 2017.

BARRIERS TO IMPLEMENTATION:
Key barriers include lack of interoperable IT systems, a requirement that patients discharge from a home visit practice (requirement since relaxed by CMS), a need to develop a more robust home-based palliative care program for patients, and an inability to cover costs of home visit physicians and Nurse Practitioners (NPs) under current reimbursement levels. Additional barriers include a need to develop stronger working relationships with community emergency departments, and a need to develop improved 24/7 capabilities in order to respond to patient needs as an alternative to emergency departments.
**EMERGENCY DEPARTMENT U-TURN**

**AGENCY:**
Advanced Home Care in Greensboro, North Carolina.

**AGENCY DESCRIPTION:**
Advanced Home Care has 13 home health branches in three states serving an average of 5,500 patients daily. Advanced Home Care is Medicare/Medicaid certified and accredited by the Accreditation Commission for Health Care.

**POPULATION IMPACTED:**
Chronic care patients that frequent the emergency department (ED) and would benefit from admission to home health from the emergency department.

**STRATEGIC PARTNERS:**
Strategic partners in this program are hospital EDs, specifically the ED medical director and ED case management.

**PROJECT DESCRIPTION:**
Advanced Home Care met with hospital ED staff, including the ED medical director and the case management staff that work in the ED. The Advanced Home Care sales staff worked with the ED staff to determine types of patients who would be the best fit to benefit from a home health referral. The process of how to conduct the referral was discussed, along with the best method of referral: paper or electronic. Together, both teams developed metrics to measure the number of admissions from the ED, payer source, discipline order, and if the patient was admitted to the hospital. The Advanced Home Care staff also provided education on home care to all three shifts of the ED staff, including physicians and nurses.

**RESULTS:**
Each month, Advanced Home Care receives an average six to eight referrals from the ED, of which, 80 percent are Medicare patients.

**BARRIERS TO IMPLEMENTATION:**
A key barrier to implementation was that new ED staff are unaware of the home health referral process as the ED staff are less focused on preventing readmissions than are hospitalists. Furthermore, the ED pace was so busy that many clinicians found it to be extra work on the discharge plan to refer to home health.
THE INTEGRATED CARE MODEL

AGENCY:
Sutter Care at Home’s Center for Integrated Care in Sunnyvale, California.

AGENCY DESCRIPTION:
Sutter Care at Home (SCAH) is one of the largest not-for-profit home health care and hospice agencies in northern California. Founded in 1906, SCAH is committed to compassion and excellence in home care, hospice, home medical equipment, home infusion therapy, and respiratory care, serving more than 150,000 patients in 23 counties each year. As an affiliate of Sutter Health, SCAH is leading the transformation of home care to achieve the highest levels of quality, access, and affordability.

POPULATION IMPACTED:
The Institute of Medicine’s report, “Crossing the Quality Chasm: A New Health System for the 21st Century” called for reforms to promote the delivery of “patient-centered” care. The new Sutter Center for Integrated Care answers this call by promoting care that is responsive to patient preferences, needs, and values, while ensuring patients’ goals drive all care decisions. One of the center’s initiatives is the dissemination of the Integrated Care Model (ICM) which is a person-centered, evidence-based, coordinated approach to care for all patients. The ICM program is designed to assist providers in achieving the “Triple Aim” of improving health, the experience of care, and the lowering of health care costs.

The Center offers an ICM course on the specific competencies needed to engage patients in their self-care, to assist with patient acquisition of self-management skills, and to build patient confidence with self-care. These competencies are relevant in the care of all patients, irrespective of their particular medical condition or problem. The course is structured in a “train the trainer” format to enable trained individuals to disseminate information gained from the course throughout their organization.

STRATEGIC PARTNERS:
To date, ICM model training has been provided to more than 4,500 health care professionals caring for patients in hospital and community settings in 47 states.

The center’s professional staff not only train health care professionals nationwide, but partner with providers to assist with “hardwiring” model concepts and ensure high quality care is consistently delivered over time. Hardwiring includes implementation of the best methods to identify patient barriers to self-care, embedding care plan interventions in daily care delivery, improving electronic medical record documentation to capture patient barriers, establishing patient-centered goals and tracking progress, and the selection of quality metrics to drive change and promote continuous improvement throughout the organization.

Three home health agencies are also embarking on a collaborative project to improve care transitions through the utilization of the ICM program, along with a transitions protocol. These agencies are receiving training with a focus on best practices in care transitions and will be implementing the ICM transitions protocol and evaluating protocol efficacy.

PROJECT DESCRIPTION:
The ICM program was designed to improve the quality of care provided to patients with chronic conditions. At the time of model’s inception, the healthcare system was transitioning from volume to value-based reimbursement. SCAH’s prior experience with remote monitoring informed us that our patients were struggling with condition management. SCAH heard from clinicians during case conferences that many struggled to engage patients that seemed passive. With these needs in mind, SCAH conducted a thorough assessment of the literature to cull best practices from medicine and from social psychology and adult education. Seminal white papers and MedPAC data were central to model planning and refinement.

The ICM program continually evolves as new evidence presents itself and as we gather more information from patients about their care experiences. SCAH’s guiding principle is that the patient must be at the center of health care team. One way SCAH puts this principle in practice is to include patients and caregivers in the development and evaluation of our patient-facing materials. For example, SCAH’s new personal health record (PHR) is being field tested with patients and caregivers in clinical settings. Their feedback on all aspects of the PHR informs edits and design modifications and ensures that the end product is actionable and accessible from the user’s perspective—not just from a clinical perspective.

RESULTS:
Project success is evidenced by patient, provider, and community endorsement. SCAH’s new health literate “Stoplight” forms, designed to increase patient knowledge and inform actions for condition exacerbation, were recognized by the Center for Plain Language in Washington, D.C. with a 2013 ClearMark Award of Distinction. Patients using these forms—available for 13 different conditions—report feeling a greater sense of control over their conditions.

The ICM program was also selected as a 2013 Home Care & Hospice LINK Spirit of Innovation award winner for the model’s focus on best practices and Sutter Care at Home’s commitment to care. SCAH staff and hospital partners acknowledge the model’s value in making a difference in the care including promoting a sense of meaningful and valuable work.
OUTCOME MEASURES:

Suggested process metrics for agency adoption include:

• Percent of staff attendance at weekly multidisciplinary case conferences

• Percent of staff using Situation, Background, Assessment, and Recommendation (SBAR) communication in coordination notes

• Percent of patients with patient-specific goal documented in EMR

Suggested outcome metrics for agency adoption include:

• Acute care hospitalization rates

• 30-day readmission rates

• HHCAPS scores

• Employee turnover rates

Results were tracked following initial model implementation at one agency over the course of two years. During this period, acute care hospitalization results were reduced from 29 percent to 14 percent, and RN nurse turnover was reduced from 20 percent to 6 percent. Agency patient satisfaction scores also increased, as did employee engagement.

A second evaluation is currently underway at Sutter Care at Home, related to the transitions protocol based on ICM tenets. At present, documentation of patient personal goals has increased from 10 percent to 80 percent, and 30-day hospital readmission rates for heart failure patients decreased from 25 percent to 10 percent over the course of one year.

BARRIERS TO IMPLEMENTATION:

Barriers to ICM program hardwiring include constraints posed by an electronic medical record framework primarily designed to support Medicare regulations—not practice change. Prior to model deployment, work had to be completed to add a field for the patient’s personal goal and develop a method to run reports on the metric.

Another barrier is the realization for many providers that their behavior change is needed to promote a patient-centered approach. A collaborative approach where patients are presented with options and decisions are shared may run counter to current directive approaches. This approach must be supported with tools and opportunities to practice in order to facilitate this change. The institution of “TIP of the Month” sheets, which are short educational reviews, assist with provider behavior change. Other skills, such as motivational interviewing (a patient-centered communication style taught in the ICM class), take time to master. Key principles taught in class must be revisited continually until they become a normal and natural part of care delivery.
AGENCY:
Visiting Nurse Health System in Atlanta, Georgia.

AGENCY DESCRIPTION:
As Georgia’s leading nonprofit provider of health care at home, the mission of Visiting Nurse Health System (VNHS) is to improve the lives of those served. VNHS cares for patients and their families in 26 metro area counties. VNHS provides in-home nursing care, rehabilitation, primary care, and hospice services. They also operate the Hospice Atlanta Center, a 36-bed inpatient facility in Brookhaven, Georgia. VNHS cares for all who need services, regardless of diagnoses or financial circumstances. The Jesse Parker Williams Foundation initially provided $100,000 for this project.

POPULATION IMPACTED:
This program targets mobility-challenged, chronically ill seniors in the greater Atlanta region. VNHS provides these seniors with primary care in their home. In 2012, the program cared for 262 patients—primarily in DeKalb and Fulton Counties. A typical patient is age 80 or older, has at least seven chronic conditions, takes an average eight medications daily, and has had at least one hospitalization in the past year. Sixty-two of these patients were concurrently participating in the Independence at Home (IAH) demonstration.

PROJECT DESCRIPTION:
Without access to primary and preventive care, seniors can succumb to a cycle of inefficient care delivered episodically via visits to the emergency department, brief hospitalizations, and discharges home without proper follow-up care. As a result, approximately 18 percent of Medicare patients are readmitted to the hospital within 30 days of hospital discharge. Readmissions adversely affect seniors’ health and peace of mind, undermine their ability to live independently, and result in excessive Medicare spending. The HouseCall program prevents this type of crisis-driven care through a proactive approach that facilitates ongoing, regular monitoring of seniors’ health.

Specific benefits to this program include:

- Increased access to care
- Decreased emergency room visits and hospitalizations
- Disease management education
- Peace of mind for patients
- Cost savings

RESULTS:
There are a myriad of benefits from enacting this program in Atlanta. A survey conducted of patients stated that 74 percent had not seen a PCP in the previous year. Once in this program, each patient receives six to 12 visits from either a PCP or Nurse Practitioner (NP) per year in their home. Another added benefit is fewer hospitalizations and a decrease in emergency room visits. Since they receive timely medical attention in the home, approximately 80 percent of patients avoided hospitalization or an emergency room visit.

Each time a patient is seen by a clinician is an opportunity for disease management education. The clinician can give the patient a quick lesson in their specific disease management or answer any questions while in their home.

OUTCOME MEASURES:
In the spring of 2013, 70 primary care patients were randomly selected to receive patient satisfaction surveys. Twenty-nine patients returned the surveys (a 41 percent response rate), which revealed the following:

- 69 percent of respondents stated they were always or usually able to be seen in their home within 36 hours of contacting the office for care; 36 hours is the benchmark for receiving timely care set by the American Academy of Home Care Physicians.
- 93 percent of respondents stated that the ability to receive medical care in their home has improved their quality of life.
- 86 percent of respondents reported high satisfaction with the amount of time their primary care provider spent with them.
- 90 percent of respondents reported consistent interaction with their family/caregiver.
- 79 percent of respondents stated the services have reduced their trips to the emergency room.

VNHS receives Medicare claims data on the portion of primary care patients participating in the IAH demonstration project. The most recent data received contains information on 62 IAH patients during the time period of June 1, 2012 through February 28, 2013. This data shows that 69 percent of patients (43 of 62) avoided a hospitalization and 84 percent of patients (52 of 62) avoided an emergency room visit during this time period. Updated data for patients in both programs will be available in the spring of 2017.

BARRIERS TO IMPLEMENTATION:
Barriers to this program include issues with clinical reporting software. VNHS had issues with providing staff education on for software utilization. VNHS also had difficulty in enrolling eligible patients to participate in the program. This low patient census caused staffing shortages. As there were no patients to see, two nurse practitioners left the program.
SAME-DAY JOINT REPLACEMENTS

AGENCY:

AGENCY DESCRIPTION:
Since 1968, Home Nursing Agency has been the largest post-acute provider of services between Pittsburgh and Harrisburg, Pennsylvania, specializing in home health, hospice, behavioral health, private duty, pediatric care, and a host of additional community-based waiver services.

POPULATION IMPACTED:
A target group of patients in west central Pennsylvania with low co-morbidities under the age of 65 requiring a hip or knee placement.

STRATEGIC PARTNERS:
In this program, the strategic partner was University Orthopedics Group. This group provided all surgery services, including the surgeons, support staff, and anesthesiology. In addition, Highmark Blue Cross Blue Shield (BCBS) of western Pennsylvania was a funder in this project.

PROJECT DESCRIPTION:
The avatar program is embedded on a tablet given to each patient enrolled in the study. The avatar provides the patient with an overview of what to expect before, during, and after the surgery. Most importantly, this program teaches the patient signs, symptoms, and self-care techniques to recover from surgery. The patient is provided with techniques to change dressings, handle pain management, and what to expect following physical therapy appointments.

RESULTS:
The program has had positive clinical and financial results. Clinically, patients had a quicker recovery time and quicker range of motion (ROM) response. This led to a savings of approximately half the costs (about $15,000 per patient served) as compared to an in-patient DRG payment. This is an estimate based on what the hospital would have received as a DRG payment as compared to what the orthopedics group and Home Nursing Agency received for these services. Highmark BCBS has set a date for bundled payment compensation, however, the savings sought by Home Nursing Agency are being realized outside the bundled payment model. It is expected that when Highmark BCBS begins paying under the bundled payment pilot, quality outcomes will be part of the incentive portion of the payment.

OUTCOME MEASURES:
No patients were readmitted to the hospital for knee-related issues during this episodic coverage period. There were no emergency room visits nor were there any unscheduled visits with the orthopedic physician group. Furthermore, no patients in the program reported complications.

BARRIERS TO IMPLEMENTATION:
There were very few barriers to the success of this project, namely because this was an independent setting with University Orthopedics Group. Digital avatars were used to reinforce patient education both before the joint replacement and after surgery regarding recovery expectations. The avatars were supported by mobile tablets and used by patients throughout the duration of the care episode.
POST-CARDIOThorACIC SURGICAL INFECTION PREVENTION PROGRAM

AGENCY:
Visiting Nurse Service of New York, New York.

AGENCY DESCRIPTION:
For 120 years, the Visiting Nurse Service of New York (VNSNY), the largest not-for-profit home- and community-based health care organization in the country, has been committed to meeting the health care needs of New Yorkers. Today, VNSNY provides care throughout all five boroughs of New York City, Westchester, Nassau and Suffolk counties, and upstate New York. VNSNY employs 2,445 nurses, 525 rehabilitation therapists, more than 11,560 home health aides, 525 social workers, and 160 other clinical professionals.

POPULATION IMPACTED:
VNSNY in collaboration with Mount Sinai Hospital (MSH) identified the need to develop a home care program for eligible and appropriate patients to go home in lieu of sub-acute rehab. It was identified that patients going to sub-acute rehab had an increase in 30-day hospital readmissions for sternal wound infection.

STRATEGIC PARTNERS:
VNSNY worked in collaboration with MSH in New York City. The collaborative workgroup consisted of:

VNSNY:
• Clinical education developed educational tools and materials for field nursing staff.
• Clinical operations trained field nurses in all geographical service areas. Rehab department developed an intensive cardiothoracic home care rehab program for patients to go home in lieu of sub-acute rehab. The rehab department provided training and education to all field physical therapists and occupational therapists.
• Intake education developed and implemented teaching/training materials for the VNSNY intake staff at MSH.

MSH:
• VP, Nursing, Mount Sinai Heart
• Nurse Director, 7W, Cardiothoracic Inpatient Unit
• Medical Director, Mount Sinai Cardiomyopathy Program
• Surgical Site Infection (SSI) Workgroup
• Department of Rehabilitation
• Department of Infection Control
• Social Work Department
• Case Management Department
• Department of Quality Initiatives

PROJECT DESCRIPTION:
The VNSNY/MSH workgroup was created in September 2012 and met monthly. The workgroup’s first step was to match the teaching tools developed and used on the 7W inpatient unit to the teaching tools that would be used to continue the teaching in the home (transitional care) by the home care RN. Next steps were to develop the training materials for the VNSNY field nurses, physical and occupational therapists, and intake team. The program went live on March 4, 2013.

RESULTS:
The project generated a renewed focus on nursing interventions and patient teaching to prevent surgical site infections for the home care patient. The focus was on the impact of blood glucose control and the impact on wound healing and basic infection control practices.

MSH recommended use of the Joint Commission “Speak Up: Five Things You Can Do to Prevent Infection” pamphlet to teach patients and care givers the importance of hand hygiene. Nurses were instructed to demonstrate and ask for a return demonstration on hand-washing technique to highlight the importance of this basic strategy to reduce SSI.

As a result of this project, VNSNY added the Joint Commission tool “Speak Up: Five Things You Can Do to Prevent Infection” into their clinical orientation program and into the VNSNY Wound Care Protocols resource tool for clinicians.

The OASIS C assessment tool requires the clinician to document the healing status of surgical wounds on admission to home care. In the reporting of outcomes data, 33.6 percent of the surgical wounds were reported as “not healing.” This definition required clarification for MSH regarding clarification of reports on outcomes related to wounds and OASIS.

In home health care, the Outcome and Assessment Information Set–C (OASIS-C) requires the clinician to assess and document the healing status of surgical wounds on admission to home care. The Wound Ostomy and Continence Nurses Society Guidance on Oasis-C Integumentary Items (2009) provide the definitions for healing status choices and guides the clinicians’ assessment and documentation.

OASIS-C differentiates between surgical wounds healing by primary intention and wounds healing by secondary intention. There are two options for a wound healing by primary intention: “newly epithelialized” or “not healing”. The clinician selects “newly epithelialized” if the assessment matches the definition:

• wound bed completely covered with new epithelium
• no exudate
• no avascular tissue (eschar and/or slough)
• no signs or symptoms of infection

A wound that is healing by primary intention but does not completely match that definition is described as “not healing.” For surgical wounds that are healing by secondary intention, the healing status includes “newly epithelialized, fully granulating, early/partial granulation and not healing.”

All patients were asked permission to have their surgical wounds photographed upon admission to home care as part of wound consultation. A Certified Wound and Ostomy Care Nurse (CWOCN) reviewed patient wound photos and assessed them for evidence-based topical treatment options. The photos were transmitted via secure email to a nurse practitioner (NP) or physician at MSH.

OUTCOME MEASURES:

From the beginning of March to the end of May 2013, this program used unified treatment approaches, from hospital to home, for 131 MSH patients with sternal wounds. For 10 of these patients, we were able to avoid skilled nursing home admissions with the VNSNY Intensive Rehab Program. When evaluated against the Centers for Medicare and Medicaid (CMS) Outcome-Based Quality Improvement (OBQI) outcome measures, patients surpassed six out of seven national quality benchmarks for essential quality of life functions, including the patient’s pain frequency when moving, ease of breathing, and ability to walk, bathe, take medicine, and get in and out of bed. Even more impressively, 100 percent of the VNSNY-MSH patients who took part in intensive rehab showed wound improvement.

BARRIERS TO IMPLEMENTATION:

A number of barriers to implementation occurred during this project. Social work coverage was inadequate and the current social work staffing model was unable to identify all appropriate patients for the sternal wound program. Physicians and physical therapists were reluctant to send patients home with home care in lieu of sub-acute rehabilitation. Staff at VNSNY discovered the need for ongoing teaching, training, and education for field professional staff and also for MSH staff. Furthermore, a lack of standardized outcome measures were a barrier to implementation for this program.
CARDIAC CARE PROGRAM WITH LINK TO CARE TRANSITIONS PROGRAM

AGENCY:
VNA Health System in Shamokin, Pennsylvania.

AGENCY DESCRIPTION:
VNA Health System has multiple locations throughout central Pennsylvania, including home care, hospice, private duty, adult care, etc.

POPULATION IMPACTED:
The area includes 18 counties throughout central Pennsylvania and the population targeted is 65 and older with chronic heart conditions that are recently post-operational.

PROJECT DESCRIPTION:
The Quality Management Department conducted reviews and research for more than two years on chronic care conditions, reasons for rehospitalizations, knowledge deficit for particular populations, medication management, necessary education, and the use of telehealth monitoring in the home setting. This research was then combined with an already established cardiac education program, able to hit all the necessary areas for complete cardiac patient care.

The next step was to determine that poor care transitions results in more frequent early rehospitalizations based on the research and cardiac patients. The Quality Management Department then investigated the proper visit frequency for patients with and without telehealth monitoring to benefit from the program. This was done by reviewing the number of frontloading visits, phone calls to follow up in-between visits, and determining when to place the telehealth unit in the home. VNA Health System used national, individual hospital, and state statistics to look at age, demographics, education level, and income to determine the population that would benefit from a link of these patients with the care transitions program.

Twenty percent of all Medicare patients are readmitted within 30 days. Half of those patients never had a follow-up appointment with their doctor or surgeon. Congestive heart failure (CHF) is one of the top diagnoses in which patients are readmitted frequently, because of a lack of follow-up care and lack of knowledge regarding proper diet for associated illnesses. Lack of knowledge in simple daily weights and how to follow-up with results was found to be missed with patient education very frequently. Medication changes are one of the top three reasons for hospitalization. Research found that the nurse discharging the patient from the hospital had an average of just 21 minutes to perform discharge education. The discharge information was fully comprehended by patients only 25 percent of the time.

Psychosocial factors increase the risk for early rehospitalizations. Possible use of IV diuretic therapy in the home may decrease the need for ER visits and hospital readmissions. Home telehealth monitoring has shown to be able to determine early signs and symptoms of heart failure, giving the home nurse the ability to contact the physician for medication changes to prevent an ER visit or hospital readmission. In certain areas researched, lack of education and depressed areas with lack of funding may lead to an inability to understand medication regimen and/or purchase medications. Research in certain areas finds lack of caregiver involvement leads to less cooperation from the patient. Without oversight by family member or caregiver, patients do not comply with medication regimen and/or diet regimen, leading to early rehospitalizations.

RESULTS:
VNA Health System has proven cost containment by decreasing nursing visits per episode of care related to daily telehealth monitoring. Further, there has been success with patient compliance and appreciation of monitoring. VNA Health System is able to determine other areas of concern, i.e. atrial fibrillation with a patient, blood pressure problems, oxygenation issues, etc. While the telehealth system for monitoring has worked without issues, the equipment used has several problem areas.

OUTCOME MEASURES:
This program has reduced early hospital readmissions and ER visits, taking into consideration the CHF diagnosis and age population. Not only has this helped with chronic conditions, but also with other telehealth monitoring issues (i.e. BP and/or oxygenation problems) leading to a decrease in readmissions and/or ER visits.

BARRIERS TO IMPLEMENTATION:
The main barriers include issues with the telehealth system’s accessibility in homes without a phone line or with people that bundle their phone, television, and internet. Outsourcing of telehealth monitoring has also been a barrier because of companies that only perform for several months and because many patients only have cell phones as their main telephone line, causing issues with installing telehealth systems. VNA Health System has added in-house monitoring for more personal control and to acquire the statistics needed to determine the benefits for the targeted populations. Cost control is an issue because insurance companies do not reimburse for telehealth monitoring.
AIM® (ADVANCED ILLNESS MANAGEMENT)

AGENCY:
Sutter Care at Home, Fairfield, California.

AGENCY DESCRIPTION:
Sutter Care at Home (SCAH) is one of the largest not-for-profit home health care and hospice agencies in northern California. Founded in 1906, SCAH is committed to compassion and excellence in home care, hospice, home medical equipment, home infusion therapy, and respiratory care, serving more than 150,000 patients in 23 counties each year. As an affiliate of Sutter Health, SCAH is leading the transformation of home care to achieve the highest levels of quality, access, and affordability.

POPULATION IMPACTED:
AIM caters to patients with advanced chronic illness, specifically an oncology diagnosis, heart failure, end stage neurological diseases, chronic obstructive pulmonary disorder, and end stage renal disease (ESRD). Sutter Health’s AIM Care Team helps more than 7,000 patients in 15 counties of northern California to better manage their health in the comfort and privacy of their home. The current census is more than 2,100 patients and there were 85,000 patient contacts in the last 12 months. These patients are in their last year of life and do not have to qualify or be eligible for hospice at the time of admission to AIM. This is palliative care and curative care provided concurrently.

STRATEGIC PARTNERS:
CMMI awarded Sutter Health a three-year, $13 million Health Care Innovation Award to support the expansion of AIM throughout Northern California. SCAH works closely with CMMI to report program results on an ongoing basis.

PROJECT DESCRIPTION:
AIM is a nurse-led care management program caring for patients with advanced chronic illness in their last 12 to 18 months of life. Currently, 335 staff members are trained in the AIM program.

AIM integrates and navigates the health care system for the patient and their family, while tailoring symptom management and other care and treatment plans to the patient’s personal goals. The program is designed to extend and enhance the relationship patients have with their physician.

All patients receive home visits initially when they are enrolled. During this time the clinical team learns about the patient’s health issues, lifestyle, and personal preferences to tailor a care plan that meets the patient’s needs. Once in the program, the nurse initiates the pillars of the program:

• Patient engagement in self-management
• Medication management
• Physician follow up, with communication and coordination

Physicians are highly satisfied with this program and appreciate the collaboration and teamwork from AIM. SCAH documents monthly summary notes into the physician’s electronic medical record (EMR) so they are informed and are able to follow patients’ progress. These notes include person-centered goals and status of advance care planning. The referring physician and/or primary care provider (PCP) are included in the plan of care and are partners with AIM and the patients mutually served by SCAH.

RESULTS:
The AIM program sees results in the following key areas:

Improving Health:
• Improve transitions of care
• Improve quality of life of patients with advanced chronic illness
• Provide high patient, caregiver, and physician satisfaction

Improving Care:
• Goals of care and advance care plans within 30 days of enrollment
• Increase access for patient/family to comprehensive palliative care

Lowering Cost of Care:
• Medicare and other payer cost savings (aggregate and per enrollee)
• Cost savings in providing care overall

OUTCOME MEASURES
After 90 days on AIM program, there was a 59 percent reduction in hospitalizations, a 19 percent reduction in emergency department visits, and a 67 percent reduction in ICU days.
BARRIERS TO IMPLEMENTATION:

Barriers to successful implementation include difficulty with EMR integration. Currently AIM charts in two distinct Electronic Medical Records (EMRs); one for home health and another for the physician services. One of the biggest challenges for AIM is integrating this information while not creating more work for clinicians. An additional challenge is creating simple communication that allow for better care coordination across the health care continuum.
CREATING AND NEGOTIATING BUNDLED PAYMENTS

AGENCY:
Hartford HealthCare at Home, Hartford, Connecticut.

AGENCY DESCRIPTION:
Since 1901, Hartford HealthCare at Home (formerly VNA Health Care) provides home health care to residents of 59 towns in central Connecticut and the greater Waterbury area. The agency helps people live independently in their own homes by offering a full spectrum of home health care ranging from skilled nursing, hospice, rehabilitation, and speech therapy to cardiac nursing. At Hartford HealthCare at Home, home care services are designed to encourage independent lifestyles through assistance from visiting nurses, private duty nurses, physical and speech therapists, homemakers, personal care attendants, home health aides, social workers, Meals on Wheels, geriatric care management, and home health monitoring. Hartford HealthCare at Home employs more than 950 individuals at eight branch offices and has 17,000 total admissions a year.

Hartford HealthCare at Home is part of the Hartford HealthCare network. This integrated health care system includes a tertiary-care teaching hospital, an acute-care community teaching hospital, an acute-care hospital and trauma center, two community hospitals, the state’s most extensive behavioral health services network, a statewide clinical laboratory system, a large primary care physician practice group, a regional home care system, an array of senior care services, and a large physical therapy rehabilitation network.

POPULATION IMPACTED:
Hip and knee replacement patients from the Hartford Health Care network admitted into home care.

STRATEGIC PARTNERS:
A key partner in this program is the hospital system Hartford HealthCare network. A bundled payment is made from by the Centers for Medicare and Medicaid Services.

PROGRAM DESCRIPTION:
In order to combat growing financial losses, Hartford HealthCare at Home identified potential areas in which to offset losses and authorization issues.

A potential opportunity for savings is in orthopedic cases, specifically total hip replacements (THR) and total knee replacements (TKR). Based on the 2010 Medicare claims data, Hartford discovered that the state of Connecticut has a much higher discharge to skilled nursing facilities (SNFs) than compared to other states.

Hartford HealthCare at Home sees approximately 1,300 knee and hip admissions annually (there is a 2:1 ratio of knee to hip patients) and was approached by other providers to design an alternative payment model.

Hartford HealthCare at Home is also part of the Model Three CMS Bundled Payment. This model is for post-acute care. This bundle includes all services throughout the episode at the beginning of post-acute care services. This includes SNFs, inpatient rehabilitation facilities, long-term care hospitals, and home health.

Services included in this episode must begin within 30 days of discharge from the inpatient setting and terminate in 30, 60, or 90 days after the initiation of the episode. Research supports that bundled payments align incentives for all providers to partner. Partnerships can help drive a positive patient experience and can align clinical outcomes across settings.

Taking into account the needs of THR and TKR patients in the Connecticut and participation in bundled payments, Hartford HealthCare at Home is developing a pilot program within their health system for patients with THR and TKR. Hartford Health at Home is seeing a much younger population opting for total or partial hip/knee replacement surgery. Technology is changing and improving everyday, which reduces service utilization. These orthopedic patients can go from post-operation straight to the home without any outpatient services. There are many benefits stemming from the faster rate of recovery and fewer days in acute settings. These include a reduction in the cost of care, better outcomes (including functional score improvement) and patient satisfaction scores.

These orthopedic cases utilizing inpatient services are more expensive and have no better outcomes than home health can provide.

RESULTS:
Hartford HealthCare at Home developed a pilot program within the health system. It is a straight-to-home for partial hip or knee replacement in a risk-based contract with a leading orthopedic surgical group. This includes:

• A dedicated nurse that meets the patient when they arrive home from the hospital.

• The bundled payment will cover the fees and costs of surgery, facility, home health therapy visits, and overnight stay in the facility.
• Covers a period of 90 days for any complications received from surgery.

• This will be utilized for both straight commercial, managed care, and managed Medicare.

• Accounting for the revenue and margin will be an internal system cost-sharing model.

OUTCOME MEASURES:
Results for this program can be found in the savings. The average payer costs per day:

• Acute inpatient setting: $8,000 a day

• SNF: $460 a day

• Home health visit: $155 a visit

• Outpatient rehabilitation: $80 a visit

Three days as an inpatient, 10 days in a SNF, 10 home health visits, and 10 outpatient visits totals to $31,000. In the bundled payment model the patient would have three days in an acute setting, 14 visits in home health, and 10 visits to an outpatient facility which costs $27,000. This totals approximately $4,000 in savings per case.

BARRIERS TO IMPLEMENTATION:
Barriers to successful implementation include limited insight as to what managed care companies offer providers for bundled payment programs. For example, Aetna will pay for telemonitoring in Indiana, but does not offer payment in Connecticut. This puts the agency at a disadvantage in creating programs that may already exist.

Data is also an issue. The agency needs to show outcome improvements such as costs savings, low dependency on surgeons, and a higher volume of patients to help affect the bell curve. There must be data on the current state and the future state to prove efficiencies.
CENTURA HEALTH AT HOME
INTEGRATED TELEHEALTH PROGRAM

AGENCY:
Centura Health at Home, Denver, Colorado.

AGENCY DESCRIPTION:
Centura Health at Home (CHAH), headquartered in Denver, Colorado, is
the home care unit of Centura Health. CHAH provides home care, home
hospice, residential hospice, palliative care, telehealth, independent
living, assisted living, nursing home care, Alzheimer care, respite care,
adult day care, pastoral counseling, and bereavement services to
patients and residents in Denver, Colorado Springs, Pueblo, Canon City,
Durango, Pagosa Springs and Summit County.

Founded in 1997, CHAH provides care to more than 20,000 patients
each year and more than $500,000 of care is uncompensated or charity
care. CHAH has more than 1,300 employees and is the first home health
agency in Colorado to have implemented a telehealth system.

Centura Health is a non-profit, faith-based integrated health care system
consisting of 13 hospitals, four freestanding emergency departments,
seven senior living communities, and home health and hospice.

POPULATION IMPACTED:
For this program CHAH selected 200 patients fitting the following
criteria:

- Having a chronic disease (congestive heart failure, chronic
  obstructive pulmonary disorder, hypertension, or diabetes).
- At risk for falls.
- Aged 80 or older.
- Two or more hospitalizations in the past six months and/or two
  or more emergency room visits in the past six months.
- Being on five or more medications.
- A history of non-adherence to medications.

Patients were enrolled at two hospitals. The average age of participants
was 76, living in his or her home, managing co-morbid conditions, and
recently had a hospital visit related to an exacerbated chronic condition.

STRATEGIC PARTNERS:
The Centura Health system was a strategic partner in this program.

PROJECT DESCRIPTION:
CHAC has seen success with its telehealth program and through that
traditional programming, it has reduced the hospitalization rate of
patients in the project to 6 percent. Building upon this, CHAH created
a one-year long program to further reduce hospitalization rates and
increase quality of life scores for older adults.

Participants were split into two groups. The first used remote patient
monitoring (RPM) and had access to a 24-hour call center. This group
was given a base station display that collects information as well
as additional devices such as blood pressure cuff, pulse oximeter,
thermometer, and scale. Patients are given their equipment within 48
hours of discharge. Once in place, telemedicine nurses monitor the
patient data and call the patient with any significant changes. The
patient is also encouraged to contact the call center with questions.

The second group had a clinical call center nurse set up weekly calls
over a three week time frame to review the following:

- Medication lists and management.
- Compare medications to discharge orders.
- Educate patients using the teach-back method to ensure their
  comprehension.

This program prepares patients for eventual discharge by teaching them
how to independently monitor health indicators and how to identify red
flags for follow up with a clinician.

This year-long project was funded by the Center for Technology and
Aging as one of the five grant projects in the Remote Patient Monitoring
Diffusion Grants program. The Center for Technology and Aging was
established through the generous support of The SCAN Foundation to
promote the independence and well-being of older adults through the
broader diffusion of beneficial technologies. The center receives funding
from multiple sources, including federal and state grants and contracts,
corporate donations and grants, and private philanthropy.

RESULTS:
The specific goals of the program were to enroll at least 200 patients
and decrease the 30-day admission rates for the following conditions:
congestive heart failure, chronic obstructive pulmonary disorder, and
diabetes by two percent. In addition, they sought to increase quality of
life for their patients.

Twenty-five of the patients used telephone telehealth. The majority of
the remainder used RPM.

OUTCOME MEASURES
Results showed that rehospitalizations for patients with congestive
heart failure, COPD, and diabetes decreased by 62 percent for a
rehospitalization rate of 6.3 percent. This number is significantly lower
than the rehospitalization rate for traditional home care at 18 percent.
CHAH’s average rehospitalization rate before the program was 19 percent.

Emergency department visits for patients in the program dropped from
283 to just 21 in the year the study was conducted. Quality of life for
patients increased as did self-management and patient satisfaction.
Patient data indicated positive perceptions about technology and
satisfaction with technology. The frequency of nurse visits decreased,
creating a cost savings of between $1,000 and $1,500 per patient.
BARRIERS TO IMPLEMENTATION:

This program found that redesigned training for clinicians and staff was necessary to the program’s success. An initial barrier to implementation was training nurses on information technology. Nurses were familiar with telephonic technology but needed training and education on information technology. CHAH learned that staff engagement and buy-in was critical to the success of the program, as well as effective communication training for nurses. An additional barrier was in selecting the technology itself. CHAH changed vendors to a more cost-effective solution that was only able to monitor patients whose vitals fall outside pre-determined parameters, ensuring immediate attention was given to the proper patients.
MANAGED LONG TERM CARE

AGENCY:
VNA of Central New York, Syracuse, New York.

AGENCY DESCRIPTION:
Visiting Nurse Association of Central New York, Inc. (VNA) was founded in 1890 with the mission of bringing professional health care to the home and teaching families how to care for their loved ones. Today, VNA continues this historic legacy by delivering an unprecedented level of care specifically designed to meet the needs of the patients. The focused approach of VNA improves the quality of each patient’s life and helps each individual achieve maximum independence.

VNA Homecare was originally envisioned as a way of bringing the programs and services provided by Visiting Nurse Association of Central New York, Inc., CCH Home Care & Palliative Services, Inc., and Independent Health Care Services, Inc. together under one umbrella. Since its inception, the system continues to embrace every opportunity to better meet the changing medical and non-medical needs of those throughout the region. Most recently, VNA Homecare launched VNA Homecare Options, LLC, a Managed Long Term Care (MLTC) Medicaid plan for those eligible for a nursing home level of care, added Home Aides of Central New York, Inc. to their system, and began operating an adult day program—all of which have been designed to enhance their range of offerings and develop a health care system that is unique and progressive.

POPULATION IMPACTED:
Medicare and Medicaid-eligible beneficiaries with long-term care needs living in any of the 11 counties they are currently authorized to operate. VNA serves Onondaga, Cayuga, Chenango, Cortland, Jefferson, Madison, Oneida, Oswego, and Tompkins, all of which contain varying geographic densities.

STRATEGIC PARTNERS:
VNA of Central New York is working with two independent practice associations (IPAs) in the delivery of care management services for members in counties serviced. The IPAs provide subcontracted care management services following the VNA’s model of care.

PROJECT DESCRIPTION:
Care managers work to ensure the correct services are provided at the proper time, enabling patients to live in the most independent setting possible.

Every patient is provided an MLTC care plan. Each MLTC plan is individualized based on the care needed. Care managers work closely with the patient’s primary care provider (PCP) to coordinate everything the patient needs in order to stay safe at home by using a wide array of specialty services in their network. This care plan is designed to accelerate recovery and maintain independence.

This program includes a strong focus on prevention and wellness promotion for patients. The focus is on proper utilization of services to maximize the member’s potential of self-care and independence. Strategies are implemented to empower members and families to take an active role in their care.

RESULTS:
Increased use of preventive services, a noted reduction in complications, and less hospitalization overall.

OUTCOME MEASURES
The VNA’s MLTC hospitalization rate is significantly less than that of other MLTCs in the state. This is in large part to the model of care established for VNA patients. The graph below shows the state benchmark line in red and the blue line represents the number of patients in the program hospitalized at VNA.

BARRIERS TO IMPLEMENTATION
As a new program in some counties the VNA serves, physician providers often do not realize the value of this program or how it operates and are hesitant to join as a network provider or refer patients to the program.
PREDICTIVE INDEXING: REDUCED TURNOVER ENHANCES HEALTH CARE QUALITY AND PROFITABILITY

AGENCY:
Visiting Nurse Association of Northern New Jersey, Morristown, New Jersey.

AGENCY DESCRIPTION:
The Visiting Nurse Association of Northern New Jersey (VNA) pioneered the concept of home health care in its region in 1898 when the agency’s first nurse set out on a bicycle to assist residents of greater Morris County area. Since that time, VNA has been at the forefront of addressing major public health concerns and has established itself as one of the state’s leading comprehensive home care providers. In fact, VNA made more than 144,000 visits last year and achieved patient outcomes and satisfaction levels that were among the best in the state.

STRAategic PARTNERS:
Elizabeth Faircloth, Vice President of Augur Inc., a PI Worldwide Member Firm. VNA embraced the use of the Predictive Index (PI), a scientifically-validated tool that accurately and efficiently reveals key characteristics and traits which are indicators of compatibility with specific workplace roles. In fact, the Predictive Index provided the critical element—the personality measure—needed to fully execute and realize the benefits of Scott’s Clinical Ladder. Scott’s Clinical Ladder is designed to recognize and motivate ongoing development of expertise and professionalism of nurses.

PROJECT DESCRIPTION:
In recent years, VNA has confronted challenges common to all health care organizations including third-party reimbursement constraints, uncertainties related to health care reform, and a shortage of nurses and other skilled health care professionals. With an annual nurse turnover rate slightly below industry averages at 17 percent, this could be attributed to external factors such as the competitive local employment market which encompasses nearby New York City and the prohibitive cost of living where VNA is headquartered in New Jersey’s most affluent county. However, the executive leadership of the organization conducted a rigorous review of internal factors contributing to turnover with the goal of finding means for improvement.
That internal review examined how the nursing shortage was impacting retention, succession planning, productivity, profitability, and patient satisfaction. It identified that employee behaviors which contributed to the turnover included a lack of motivation and disengaged staff. The review quantified additional operating expenses and waste resulting from high turnover and determined that higher recruitment and training costs, and financial incentives were not solving recruitment gaps.
Several initiatives and solutions were implemented in the aftermath of the organizational review, including a proprietary Clinical Ladder designed to more clearly delineate nursing competence levels. These tools established a foundation for stronger recruitment, retention, and employee development. However, the turning point was the introduction of the Predictive Index which ultimately allowed VNA to "connect the dots" and integrate the Clinical Ladder and other missing elements into its hiring practices. Most importantly, the PI assisted the organization with establishing a corporate definition of talent.
To introduce VNA to PI, Faircloth led a Predictive Index Management Workshop where HR and senior managers completed the assessment themselves and then learned how to interpret and apply the behavioral insights derived from its use. The group was also trained in Performance Requirement Options (PRO), a job analysis tool used to define behavioral requirements for specific roles. In fact, VNA integrated the PI results of several top performing nurses with PRO results to determine the best job model for that position based upon behavioral characteristics common to all of the successful nurses such as lower levels of dominance and a strong desire to abide by the rules.
Using this data, hiring managers now quickly and accurately compare a candidate’s PI to the job PRO and conduct a fit-gap analysis. "PI prompts all parties involved—the candidate, the hiring manager, and senior management—to collectively recognize what a candidate will bring to the table and what training, mentoring and support will be required," observed Lisa Salamone, VP, Chief Operating Officer. "We’ve also discovered that when gaps are detected using this process, it does not immediately disqualify a candidate. It creates awareness and gives us the ability to talk openly about potential concerns and challenges."
VNA now requires job applicants for all positions to complete a PI. All interviewers are provided with a copy of each applicant’s PI and a PRO and that information has made it much easier to reach a consensus about each candidate and make joint hiring decisions.
As a result of this success, the PI and the PRO are now being integrated into an array of other HR activities at VNA:

- Customized PROs are being successfully used to staff some hard-to-fill positions such as nursing roles with the burgeoning private care division which require an ability to work with clients who fund their own care and thus can sometimes be demanding because they are unconstrained by third-party payer and insurance plan standards.
- New hires and employees are being groomed for management positions based upon PI results since those who demonstrate slightly higher levels of dominance are likely to require advancement to management roles to remain engaged in their work.
- New hire orientation is customized based upon PI information that affords VNA team leaders with a greater understanding of their new colleagues’ behaviors. For instance, a leader may amend how he or she communicates or delegates to better align with how an individual learns and functions, thus making the onboarding process much smoother.
- The PI is used to optimize the employee review process. By reducing subjective content, it facilitates more productive discussions and allows managers to more effectively deliver feedback in a non-judgmental manner that employees...
prefer. Since evaluations are given at the end of a new hire’s introductory period and again annually, managers use the PI to track the fits and gaps between the individual and their role so they can establish a roadmap for coaching and mentoring.

RESULTS: Since the introduction of PI, the VNA has experienced some dramatic improvements:

- Employees are being successfully groomed for promotions into leadership roles and strategic positions are no longer left unfilled.
- In a highly competitive nursing market, candidates under consideration by VNA are impressed with its dynamic hiring process and excited about the prospect of working there.
- PI has been the catalyst for new initiatives including a program for recent university graduates. The PI has been instrumental in helping VNA assess job fit/performance for a new generation of workers who have not yet acquired robust work experience. It also supports the onboarding and career planning process for this new generation by offering insights into how their motivation, communication patterns, and behaviors differ from older, more experienced colleagues.
- VNA is studying how PI can help to sustain its exceptional client satisfaction rates and patient outcomes. Client feedback is being used to identify staff behaviors, such as extroversion and patience, that enhance staff/client interactions and that data should help managers bridge potential gaps in the delivery of outstanding patient service.
- PI has allowed VNA talent to align with positive attitude in the workplace. Also, the PI has created healthy competition for upward mobility among staff. There is a clear demonstration of higher capacity of each staff.

OUTCOME MEASURES:

- Clinical turnover rates are now substantially below national averages.
- Turnover dropped by more than 50 percent from slightly more than 17 percent in Q1 2010 to less than 8 percent in Q1 2011 and has maintained a consistently lower rate through 2012.
- A record low turnover rate of 5.3 percent was achieved in Q3 2011 while the national average for the same period was 19.5 percent (Hospital and Healthcare Compensation Service 2010-2011).
- Vacancy rates fell from an annual high of 11 percent in 2010 to 6 percent by the end of 2012.

- VNA is realizing cost savings related to reduced recruitment, training, and retention incentives. Staff education costs alone have dropped by 30 percent per new hire.
- 100 percent of positions are filled for the first time in the organization’s history and its talent pool is overflowing.

BARRIERS TO IMPLEMENTATION:

VNA has a long, distinguished tradition of caring for the homebound that spans 114 years. The key to its success has been an unwavering commitment to excellence and a willingness to embrace new ideas and technologies to achieve that goal. The recent integration of PI into the organization's business model is consistent with that philosophy and is playing an important role in ensuring that the home care provider is well-positioned for a second century of service.
Updated CLAIM – COMPREHENSIVE LONGITUDINAL ADVANCED ILLNESS MANAGEMENT

AGENCY:
Penn Home Care & Hospice Services, University of Pennsylvania Health System, Bala Cynwyd, Pennsylvania.

AGENCY DESCRIPTION:
Penn Home Care & Hospice Services consists of Penn Care at Home and Caring Way, both Medicare-certified and Joint Commission-accredited home health care agencies offering the full range of home care services, including skilled nursing, physical therapy, occupational therapy, speech therapy, social work services, and home health aides. Included in this entity is Wissahickon Hospice, a Medicare-certified and Joint Commission-accredited hospice agency. Wissahickon Hospice also operates Penn Hospice at Rittenhouse, a 20-bed hospice inpatient unit used for short-term symptom management and respite care.

CLAIM is housed within the Caring Way palliative home care program of Penn Home Care & Hospice Services. Caring Way services are designed for patients receiving treatment for a life-limiting condition. The Caring Way program supports patients’ medical care by addressing their physical, psychological, emotional, and social needs. The goal is to provide the best in specialized palliative care so patients can remain at home, preserve their independence, and adapt to lifestyle changes during this challenging time. CLAIM specifically supports Penn patients with a cancer diagnosis by enhancing and increasing services provided by Caring Way.

POPULATION IMPACTED:
The CLAIM program serves University of Pennsylvania Health System patients with a primary diagnosis of cancer who qualify for skilled home care in the Philadelphia area (including Montgomery, Delaware, Chester, and Bucks counties).

STRATEGIC PARTNERS:
The CLAIM program works strictly with Penn referral sources, physicians, social workers, etc. within the Penn health system. No outside partners are included. However, Penn Care at Home worked closely with CMS (Centers for Medicare and Medicaid) grantee contacts in terms of project updates, continued funding, and reporting.

Funding for this program was provided by Centers for Medicare and Medicaid Services Innovation Grant (CMMI).

PROJECT DESCRIPTION:
The overarching goal of CLAIM (Comprehensive Longitudinal Advanced Illness Management) is to provide a comprehensive set of home care services, layered onto the existing Medicare Skilled Home Care Benefit, for patients with advanced cancer who have substantial palliative care needs but are not yet ready to enroll in hospice. The three primary aims of CLAIM are to:

1. Help patients avoid unnecessary and undesirable hospitalizations.
2. Better manage pain.
3. Provide more advance care planning support primarily by increasing the number and quality of goals of care discussions that staff have with patients and their families.

MID-PROGRAM RESULTS:
The CLAIM program results are from the end of June 2014.

Aim 1: A 10 percent increase in the proportion of patients whose pain is managed to a comfortable level:
- The historical control population’s controlled pain plus a 10 percent increase is calculated at 65.6 percent. For five consecutive reporting quarters, Penn Home Care is above this goal, showing that CLAIM patients have better pain management than the historical control group.

Aim 2: A 15 percent increase in the documentation of patient goals:
- Data shows more than a 60 percent increase in the documentation of patient goals. Ninety-five percent of CLAIM patients showed evidence of goals documentation while on service in our last quarter compared to 58 percent of patients in the control group.

Aim 3: Net cost reduction of $2,787,030 over three years:
- Measurement for this aim focuses on inpatient hospitalization costs derived from University Hospitals Consortium data. The University of Pennsylvania Health System (UPHS) hospitalization costs are calculated per patient day, and are compared with the per patient-day costs of the control group to derive cost-savings estimates. The hospitalization rate (total UPHS hospitalizations/total number of patient days) for this quarter is calculated using our new historical control data set. A larger control data set was necessary to allow for future propensity score matching with our CLAIM population.

Based on the cumulative health system hospitalizations through the end of the last reporting quarter, Penn Care at Home currently estimates a cost savings per patient per day of about $101. This estimate is based on the cost information for hospitalizations that occur within the University of Pennsylvania Health System for both the CLAIM and control group.

FINAL OUTCOMES:
Penn Home Care & Hospice Services coordinated with Penn Medicine to develop and implement the CLAIM program. The CLAIM program provided in-home support to certain qualifying patients with advanced cancer. The goals of the program include improving the quality of life, avoiding unnecessary hospitalizations and managing symptoms. Over the control group, the CLAIM program saw a rise of 30 percent in patients who feel that their pain is controlled (82 percent), an increase of 60 percent of patients who have documented their care goals (95...
percent), and a reduction in costs of approximately $101 per patient. The accumulated savings over the three-year term of the demonstration was almost $2.8 million and ended at the end of the CMMI demonstration.
AGENCY:

AGENCY DESCRIPTION:
North Country Home Health & Hospice (NCHHA) is a private non-profit home health and hospice agency providing visiting nurse services, home health care, rehabilitation, home health aides, personal care, homemaker, and companion care programs, as well as a hospice program. NCHHA is located in Littleton, New Hampshire, which is in the rural North Country, White Mountain area of the state and serves 22 towns which are primarily large, geographic areas with small populations. The patient case load shows a 20 percent higher population of chronic care patients than in other parts of the state. The average daily census is 250 patients. Several patients are served as part of the New Hampshire Rural ACO population.

POPULATION IMPACTED:
The primary population for this program is NCHHA’s chronic care homebound clients who have difficulty accessing physician services. Many of the patients have wound care issues, medication issues, or exacerbation of their chronic disease. Most patients have limited resources to manage their disease. The patient population is in the rural and mountainous North Country of New Hampshire in which travel and access to public transportation is difficult. The patients are receiving some type of home health services either through Medicare, Medicaid, private insurance, or some of our grant programs.

STRATEGIC PARTNERS:
Ammonoosuc Community Health Center in Littleton, New Hampshire provides the physician collaboration and home visits. This is crucial to the success of this program in managing and improving the chronic care outcomes of our mutual patients. A physician champion has been identified to lead the program and provides the majority of the physician home visits. Littleton Regional Health Care is also a partner in leading the care transition meetings in which we have developed common patient education tools, care management strategies, and identifying “frequent flyers” to the Emergency Department whom this program would benefit.

The agency currently contracts with a local community health center and physician practice that is billing for physician services under Medicare Part B. NCHHA has applied for local grant funding to expand the program.

PROJECT DESCRIPTION:
The physician home visiting program and chronic care management was developed by NCHHA in collaboration with Ammonoosuc Community Health Center to address the needs of chronic care patients. Through in-home collaboration with the physician and nurse or therapist, this program provides improved communication among these disciplines with the patient and their family by developing a coordinated approach to care planning, education, and tools that are focused on mutually agreed upon outcomes. The physician home visiting program also provides joint case management visits with the nurse or therapist, in addition to physician home visits, to patients who may otherwise not get to see their physician provider. This limits the nurse and physician’s ability to provide a collaborative approach to care. The program supports education and training to both the home health agency clinical team as well as the physician home visiting partners on areas that address best practices in home health and care planning for chronic care patients. The next level of the program to be implemented through the current grant funding proposal will support this training for the care staff such as home health aides and homemakers. The long-term goal of the program is to have all involved in the care management of chronic care patients be trained with the most current strategies and approaches to chronic care management, with a focus on team collaboration and patient-directed care.

RESULTS:
The program began in July 2013 and to date 63 patients have had interventions through this collaborative approach. Sixteen percent of patients would have needed to go to the hospital emergency room if these interventions had not been provided in the home. The agency has seen a reduction in the hospital readmission rate of three percent. Littleton Regional Healthcare has also seen a reduction in their hospital readmission while partnering with the agency on this project with its care transitions program. The patients included in this collaborative approach have had wound care issues, cardiac disease exacerbation, medication issues, and care management issues.

OUTCOME MEASURES:
There was a three percent reduction in the hospital readmission rate and also a one to two percent increase in most of the home health compare reportable outcomes.

BARRIERS TO IMPLEMENTATION:
The biggest challenge was the physician’s buy-in and comfort level in having another provider conduct the home visit for their patient. However, once they saw the benefit of this collaborative approach and the time savings, referrals for the program began to improve. The other barrier was funding. The Medicare Part B funding is only for one-hour billable-type visits, which does not cover many of the care planning visits. Using technology like handheld ECG machines has helped, but funding continues to be a barrier to grow and expand the program. Although the savings related to improved patient outcomes and decrease in patient rehospitalization is beneficial, increased funding through grants and other sources will be needed for future sustainability of the program.
NAVIGATING THE MEDICARE ADVANTAGE PAYMENT WORLD

AGENCY:
Athens Regional Home Health, Athens, Georgia.

AGENCY DESCRIPTION:
Athens Regional Home Health (ARHH) is a Medicare-certified Joint Commission-deemed status-accredited home health agency serving five counties, covering approximately 1,200 square miles in northeast Georgia. The agency began operations in 1998 as the result of a lawsuit appealing the denial of a Certificate of Need application for the underserved vulnerable home health population. Average daily census is 150. An associated home-infusion pharmacy, also with an average daily census of 150, covers a 15-county area.

POPULATION IMPACTED:
A trend was noted with patients electing coverage through Medicare Advantage (MA) plans. ARHH began contacting these plans to continue to serve patients on a case-by-case basis through letters of agreement. Eventually, MA volumes grew to the level that contracts were negotiated. The agency continues to negotiate rates on a case-by-case basis for patients having plans whose penetration is not high in the region they serve, but this practice has significantly decreased as MA plan penetration has increased. ARHH also leveraged the negotiation power of their associated regional medical center to keep MA reimbursement rates the same as traditional fee-for-service Medicare episodic rates.

STRATEGIC PARTNERS:
Athens Regional Medical Center’s Director of Managed Care worked with ARHH Director of Business Operations and Executive Director to assist with some initial contract negotiations. Athens Regional continues to leverage the facility’s power during the negotiation process with new MA plans to keep them informed of their agency’s outcomes and services offered.

PROJECT DESCRIPTION:
Increase MA payer mix while maintaining profitability by negotiating episodic rates with MA plans, either contractually or through case-by-case rate negotiations based on traditional fee-for-service Medicare reimbursement methodology.

RESULTS:
In calendar year 2006, ARHH MA payer mix was 5.2 percent and increased to 22 percent in 2015. Net profit has remained positive for this group.

OUTCOME MEASURES:
Outcomes for the Medicare Advantage population are similar to those of the Medicare traditional fee-for-service group. Athens Regional has noted patient satisfaction scores slightly lower in the MA population, although the decrease has not been significant. The agency has been unable to determine the cause since other MA patient characteristics mirror those of their traditional Medicare beneficiaries.

BARRIERS TO IMPLEMENTATION:
There are several barriers to successfully negotiating the MA market. The first barrier is often the hardest and that is in reaching the right individual at the MA plan to begin the contract negotiation process. This is where utilizing contacts of the parent medical center provided an advantage.

Plans have traditionally pursued negotiation of a per-visit reimbursement and attempted to include contract language outside traditional Medicare regulations. Thus far, they have been successful in blocking these efforts. As plan reimbursements decline, more pressure will be brought to bear to negotiate a different reimbursement structure or move to a risk sharing model. Understanding how CMS measures and reimburses MA plans for quality and beneficiary satisfaction is critical to leveraging better reimbursement rates during these negotiations. Utilizing their patient satisfaction and quality outcomes continues to provide ARHH with a strong negotiating position because these factors are more important to MA plans after enactment of the Affordable Care Act.

Many plans require pre-authorization, reauthorization for visits or approval to add disciplines after admission. Admission assessment documentation and the plan of care usually must be completed and provided to the MA plan within 24 hours of the initial visit. For some plans, additional time is required by office staff to obtain ongoing authorizations and for visiting staff to track visits authorized so they do not exceed visits or add disciplines without first obtaining authorization. These steps add additional administrative burden, so efforts should be taken to remove as many of these requirements as possible during negotiations. ARHH has been able to remove many of these requirements or have them apply only to subsequent episodes. We believe this is connected to our outcomes and patient satisfaction results.

In the last two years, they have seen increased post-payment audit activity from MA plans. It behooves the agency to keep abreast of individual plan procedures and document request timelines and develop an appropriate appeal strategy. ARHH has elected to appeal all denials whenever possible regardless of amount. Their experience has been MA plan reviewers seem less informed than the more mature Medicare Administrative Contractors. In addition, knowing your rights as a contracted provider versus a noncontract one is a must. And be prepared to fight for these rights, especially if your agency is a non-contracted provider.
TELEHEALTH PROGRAM

AGENCY:
VNA Care Network Foundation and Subsidiaries, Charlestown, Massachusetts.

AGENCY DESCRIPTION:
VNA Care Network Foundation and Subsidiaries is a nonprofit provider of home health care, palliative care, hospice care, and wellness services in eastern and central Massachusetts. The organization includes the Visiting Nurse Association of Boston, VNA Care Network, and VNA Hospice Care, which together served more than 40,000 patients in more than 200 communities in 2013. Private duty care is provided by Home Staff, a joint partnership with Fallon Health. VNA Care Network Foundation is a member of Atrius Health, a nonprofit alliance that is developing better ways to coordinate care across multiple settings and finding new and improved ways to coordinate home health services with ambulatory care.

POPULATION IMPACTED:
The Telehealth Program has improved the quality of life for home health patients with heart failure, hypertension, and COPD living in eastern and central Massachusetts.

STRATEGIC PARTNERS:
VNA Care Network Foundation and Subsidiaries developed the Telehealth Program. Clinicians from the organization collaborate with patients’ physicians to act quickly on telehealth data that falls outside of predetermined alert levels.

PROJECT DESCRIPTION:
VNA Care Network Foundation and Subsidiaries’ Telehealth Program combines in-person home health care visits with remote monitoring. The telehealth equipment is most often used to measure blood pressure, heart rate, oxygen saturation (SpO2), and weight on a daily basis. Results are automatically transmitted via a traditional landline or wirelessly via cellular networks. This information is automatically included in the patients’ electronic health record. Pertinent information is available in the electronic medical record for the primary care nurse. Our staff assesses the data and responds to alerts indicating vital signs are outside the desired range for a particular patient.

RESULTS:
VNA Care Network Foundation and Subsidiaries’ Telehealth Program:
- Improves patient’s ability to stay independent at home.
- Provides patients with peace of mind because their health status is being monitored every day.

OUTCOME MEASURES:
VNA Care Network achieved close to a zero rehospitalization rate for the first 30 days after discharge from the hospital for Atrius Health medical group patients on the Telehealth Program during 2013. VNA of Boston’s outcome data show a significantly lower rehospitalization rate for heart failure patients on the Telehealth Program. Nationally, the 30-day rehospitalization rate was 23 percent for heart failure patients while VNA of Boston’s heart failure patients experienced a 10 percent rate for all reasons and four percent rate for heart failure. VNA of Boston’s cardiac patients on telehealth reported higher levels of improvement in pain, dyspnea, bathing, ambulation, and management of oral medications compared to cardiac patients nationally, whether on telehealth or not, according to data from OCS.

BARRIERS TO IMPLEMENTATION:
The primary barrier to implementation and success of a remote monitoring program is the lack of reimbursement from insurers for the service despite the potential to substantially reduce overall health care costs by reducing rehospitalization rates for high-risk patients. Organizations face additional barriers to implementation of a similar program. There are hundreds of options for remote monitoring technology and insufficient data to adequately guide clinical decisions on which technologies should be adopted. While most patients and families are supportive of telehealth’s use, some resist participating in self-care activities.

Despite the possible barriers to implementation, VNA Care Network Foundation and Subsidiaries’ experiences and outcomes show the positive impact the technology combined with monitoring and home health care can have on the lives of patients at higher risk for rehospitalization.
HOME VISITING PROVIDER PROGRAM

AGENCY:
Christiana Care Visiting Nurse Association, Camden, Delaware.

AGENCY DESCRIPTION:
Christiana Care Visiting Nurse Association (VNA) is a full-service home health agency and a wholly-owned subsidiary of the Christiana Care Health System in Delaware. Average daily census is approximately 1,600 and approximate annual revenue is $45 million. The Home Visiting Provider Program is included as a component of the Christiana Care Quality Partners ACO.

POPULATION IMPACTED:
The key population impacted by this program is the frail and elderly in the greater Wilmington area. The Home Visiting Program has served 1,004 patients since June 1, 2012. The two charts below outline the current patient population by zip code and the enrollment and growth of the program since June 2012.

STRATEGIC PARTNERS:
Key strategic partners for this program are the home health agency, the hospital, physicians, and other providers. The chart below highlights the referral sources for the program, as well as percentages of patients from each referral source.

PROGRAM DESCRIPTION:
This program takes primary care directly into the homes of homebound, high-cost patients. The majority of patients have multiple chronic conditions and many cannot leave their homes. Enrollment in this program is completely voluntary and the patient is not required to give up their doctor or any benefit.

The purpose of this program is to support patients who choose to age in place or receive care in the home. This program provides timely care to reduce the need and incidence of ED visits and in-patient hospital visits. This program also provides consistent care at home through the coordination of physician, social work, home health, rehabilitation, phlebotomy, and radiology services, as well as appropriate ancillary services.

The program has been extended to five years total and may be further extended based on the potential extension of the Independence at Home program Christiana Care is concurrently running. The goal of year one was to enroll up to 200 patients (a required minimum for the program). Another goal of year one was to build up appropriate staffing; working with VNA to integrate home care and home visit services and working on the CMS-related requirements and various offices tracking processes.

The goal of the program for year two was to focus on decreasing the readmission rate. Year three is devoted to developing a care management and palliative care program to address the most frequent users of ED and in-patient services. New goals and measures are being developed for subsequent years.

Implementation of this program is funded by the Christiana Care Health System CEO discretionary funds.
RESULTS:
The patient outcomes results for those enrolled in this program is a decrease of both in-patient services (10 percent decrease) and ED use (three percent decrease).

Results

30-Day Hospital Admissions and ED Visits
Before and After HV Admission

• After entering the HV program, 30 day ED visits and inpatient admissions were both reduced

OUTCOME MEASURES
Hospital and ED admissions were initially reduced as indicated in the results graph. Subsequent initial data indicates further reduction of hospitalizations to below 18 percent for 30-day readmissions.

BARRIERS TO IMPLEMENTATION
Should the project yield strong, long-term evidence of service delivery efficiency, continued project operation should benefit from accommodations within infrastructure, including systems modifications and resource allocations.
AGENCY:
Visiting Nurse of Somerset Hills, Basking Ridge, New Jersey.

AGENCY DESCRIPTION:
Since 1904, the Visiting Nurse Association of Somerset Hills (VNA) has been providing much needed home health and hospice care, adult day services, and wellness programs to their community. It all began when parish nurse Miss Lillian Nichols offered her nursing services to the sick and poor of Bernardsville and surrounding towns. A committee formed to direct the nurse and be responsible for her services to the community of Somerset Hills, including the towns of Bernardsville, Basking Ridge, Gladstone, Mendham Borough, and Chester Borough. In 1906, this founding committee was incorporated as the Visiting Nurse Association, one of the first 100 such organizations in the United States.

Over the decades, the VNA organization, range of services, and service area continued to expand to meet the growing need for patient-centered and quality-focused home and community health care.

The mission of VNA of Somerset Hills and its subsidiaries is to provide individuals and families with comprehensive, high quality, cost-effective home and community health care services, regardless of ability to pay, using partnerships where appropriate.

POPULATION IMPACTED:
Patients with surgical wounds.

STRATEGIC PARTNERS:
Employees of VNA of Somerset Hills.

PROJECT DESCRIPTION:
Hospitalizations are costly and stressful. Medicare is working to decrease preventable rehospitalizations by imposing penalties on hospitals. Home care agencies play an important role in helping hospitals decrease rehospitalizations. According to the CDC, in 2011 there were an estimated 722,000 health care associated infections resulting in approximately 75,000 deaths. The most common infections included surgical site infections, estimated at 157,000 infections. With the introduction of total knee/hip arthroplasty as a penalized diagnosis, it is important to educate clinicians on preventing rehospitalizations in surgical wound patients.

Interventions focusing on transitioning patients between settings have shown reductions in the number of patients re-hospitalized. Clinicians received formal education on care transitions based on the HHQI Best Practice Intervention Package, Cross Settings 1. Hospitalizations in a one-month period were compared pre- and post-education.

RESULTS:
The number of rehospitalizations related to surgical wounds in June 2014 (n=28) was compared to June 2015 (n=17). The number of rehospitalizations decreased from 14.3 percent in June 2014 to none in June 2015. While there was a reduction in the number of hospitalizations, the findings were not statistically significant.

OUTCOME MEASURES:
Transitions in care help to decrease the number of rehospitalizations. This care coordination program continues to grow with total reductions in hospitalizations. New outcome data will be available in 2017.

BARRIERS TO IMPLEMENTATION:
The barrier to implementing this project is the availability of the staff nurses for the education programs. The ability to reach all staff nurses is dependent on the demands of the patients on the specific days of the education and the work schedules of the staff nurses, as the nursing staff is comprised of full-time, part-time, and per diem staff who do not work every day. If on the day of the planned education there is an influx of admissions, or a need for urgent patient visits, not all staff nurses will attend the education program.
REVENUE CYCLE REDESIGN

AGENCY:
HomeHealth Visiting Nurses, Saco, Maine.

AGENCY DESCRIPTION:
For more than a century, HomeHealth Visiting Nurses has been at home with the people of southern Maine. Whether caring for a frail newborn infant, helping an elderly patient remain independent, or providing palliative care for a life-limiting illness, HomeHealth Visiting Nurses is committed to compassion and clinical excellence.

The professional team provides the care patients need to make the transition from hospital to home where friends and family can support recovery and ease the uncertainty of illness. HomeHealth Visiting Nurses provides nursing care, palliative care, home health aide services, rehabilitative therapies, counseling and emotional support, telehealth services, community health and wellness, diabetes education and support, patient and child health, as well as an emergency response system, Lifeline.

POPULATION IMPACTED:
HomeHealth Visiting Nurses (HHVN) is a fully licensed nonprofit organization caring for patients of all ages. HHVN provides nursing, physical therapy, occupational therapy, speech therapy, home health aide, and counseling services throughout York, Cumberland, and southern Oxford Counties.

STRATEGIC PARTNERS:
BlackTree Healthcare was a strategic partner in this program.

PROJECT DESCRIPTION:
With the challenging times currently faced by home health and hospice agencies throughout the country, even minimal interruptions can have a significant negative impact on operations. HomeHealth Visiting Nurses experienced significant changes in their operations after completing a change to their EMR system, transition of their president and CEO, and turnover in key clinical management positions within the agency over a two-year period. The results of which impacted the agency’s financial stability and created a need to redesign all aspects of the revenue cycle.

This revenue cycle redesign focused on five key areas: intake, insurance verification/authorization, orders/face to face management, scheduling, and clinical management.

The purpose of the redesign was to provide agency management with different avenues and ideas that they can pursue to perform an internal assessment of agency operations to identify areas in which they can operate more efficiently.

RESULTS:
Results included positive financial outcomes for the agency with increased productivity metrics achieved in each department. Through better utilization of the electronic medical record and electronic payment submission, as well as common tools such as Outlook, positive results were found in both the back office functionality and efficiency. The same tools allowed for more efficiency in clinical visits and in record keeping by clinicians, thus reducing agency administrative expenses.

OUTCOME MEASURES:
There was improvement in a variety of areas. The financial bottom line had an improvement of $1.6M broken down as $1.2M in increased revenue and a decrease of $400,000 in operating expenses. Back office productivity was improved by implementing better systems and protocols. This included outstanding authorization requests, the reduction in volume of unsigned Face to Face documentation, and missing orders (reduction of 26 percent.)

These efficiencies were carried through in clinical outcomes as well. The LUPA percentage was reduced from 15 percent of episodes of care to eight percent in three quarters and a reduction in therapy utilization from 58 percent to 53 percent in the same three quarters.

BARRIERS TO IMPLEMENTATION:
One barrier faced was staff turnover caused by changes in assignments and a clarification of roles due to new protocols and methods. Another barrier was the lag in acceptance by the staff. However, with leadership buy-in and the increased productivity that came with the new protocols and utilization of technology, the staff embraced the changes.
UNLOCK THE KEYS TO VALUE-BASED CARE AND ALTERNATIVE PAYMENTS

AGENCY:
Home Healthcare Hospice and Community Services, Keene, New Hampshire.

AGENCY DESCRIPTION:
Home Healthcare, Hospice and Community Services (HCS) is a visiting nurse and hospice serving southwestern New Hampshire. HCS has provided comfort, care, and support to people at home since the first visiting nurses started in the Peterborough area in 1907.

More than 100 years later, Home Healthcare, HCS is a unique organization serving the region’s communities with comprehensive nursing and therapy services that help speed recovery after a hospitalization and provide independence at home for those who are chronically ill. From visits to newborns to comfort at the end of life through our hospice program, Home Healthcare, HCS is there for all members of your family.

HCS is a local, nonprofit organization. Many services are funded by Medicare, Medicaid, private insurance plans, and grants. No one is denied the care necessary for their health and safety solely on the basis of ability to pay.

Home Healthcare, HCS is Medicare certified and licensed by the state of New Hampshire as a home care provider. HCS does not exclude, deny benefits to or otherwise discriminate against any person on the ground of race, color, national origin or on the basis of disability or age in admission to, participation in or receipt of the services and benefits of any of its programs and activities or employment therein.

POPULATION IMPACTED:
Medicare-eligible beneficiaries utilizing their home health benefit.

STRATEGIC PARTNERS:
Home Health Strategic Management, Inc., Arnie Cisneros Strategic Health Programs.

PROJECT DESCRIPTION:
New care and programming models outlined in the Affordable Care Act have arrived, and home health providers face changes that alter many of our historical community care delivery practices. Value-based purchasing, comprehensive care for joint replacements (CCJR), readmission efforts and alternative payments challenge the status quo for post-acute providers. Value-based care delivery is achieved and can be accounted for through standardizations and protocols for documentation, visits, and internal processes for measuring and monitoring progress toward a clinical goals. Clinical and fiscal breakdowns of home health programs identify areas of opportunity for rewiring in terms of value rather than volume.

The agency retained oversight and management of care delivery, thus allowing the determinations of visit frequency, care planning, and discharge planning to remain in the hands of individual clinicians.

By using a service utilization model and interpretation of OASIS data to determine the type, frequency, and intensity of services, the clinician is able to more readily focus on the delivery of care. Management oversight of clinicians requires intense management of the care plan and results in improved communication and documentation that address the elements required by regulation and achievement of patient goals efficiently.

RESULTS:
Seventy-three percent increase in case mix weight and a 73 percent increase in reimbursement retained for nine months. Improved recruitment and retention of clinical staff. The episode length of stay decreased from 56 days to 33 days. Rehospitalization rates within 30 days decreased from 15.5 percent to 7.2 percent.

OUTCOME MEASURES:
Using Strategic Health Programs, the overall improvement in all process and outcome measures is statistically significant. The CMS Star Rating is holding at five stars as measured monthly in SHP data scrubber. Home Healthcare, Hospice and Community Services was measured at three Stars by CMS at the onset of implementation of the program. Improvement in the Star Rating data and outcome measurements in the publicly reported outcomes are expected to reflect this improvement, but it takes a year to see the change.

BARRIERS TO IMPLEMENTATION:
Inconsistency regarding OASIS assessment data interpretation creates inconsistency in outcome measurement and reporting. Leaving this valuable and critical interpretation to the clinician collecting the data promotes inconsistency in care delivery and care planning. This, in turn, contributes to patients receiving care they may not need or not enough care being delivered. In addition, increased utilization of rehab visits to achieve outcomes required more physical therapists and occupational therapists produced an increased stressor on scheduling and resource management of therapy caseload and visit volume.
IMPACT OF AN IN-HOME PHARMACIST WORKING IN CONJUNCTION WITH NURSES

AGENCY:
Visiting Nurse Association of Kansas City, Kansas City, Kansas.

AGENCY DESCRIPTION:
Established in 1891, Visiting Nurse Association (VNAKC) is a nonprofit home health agency. VNAKC offers a wide range of in-home services for people in and around Kansas City. As a United Way agency, VNAKC welcomes all qualifying patients regardless of ability to pay.

Through dedication to the health and wellness of their community, VNAKC delivers positive clinical outcomes that exceed national averages. VNAKC uses the latest technology available to meet the changing needs of their community.

What they do for their patients may be complex, but VNAKC’s mission is simple: to bring exceptional health care into the homes of everyone they serve.

POPULATION IMPACTED:
The population impacted by this program is Medicare patients with congestive heart failure (CHF), COPD (chronic obstructive pulmonary disease), diabetes, and those patients taking eight or more medications.

Target Population and Communities:
- The 2014/15 VNA Visiting In-Home Pharmacist program reached 228 patients (66 percent female, 34 percent male) in the metropolitan Kansas City area.
- Disease conditions – Patients qualified for this program by presenting with a primary diagnosis of chronic obstructive pulmonary disease (COPD), congestive heart failure (CHF), diabetes or poly-med (eight or more medications).
- Patients were seen in their home by two senior pharmacy interns and/or a Pharmacist Preceptor from June 1, 2014 through May 31, 2015.
- Average age of the patients: 72 years old
- County break-down for 228 patients
  - Cass County, MO: 9 percent
  - Lafayette County, MO: 4 percent
  - Jackson County, MO: 62 percent
  - Johnson County, KS: 13 percent
  - Wyandotte County, KS: 9 percent
  - Other Missouri Counties: 3 percent

STRATEGIC PARTNERS:
VNA worked closely with the University of Missouri-Kansas City School of Pharmacy during the implementation of the visiting pharmacist in-home program. The School of Pharmacy Dean and senior staff have been invaluable by providing their expertise and guidance during the first year.

After an extensive search for a part-time pharmacist, an agreement has been established with TRIA Health, a medication management organization, to provide necessary oversight of students. This position attained adjunct faculty status with the University of Missouri-Kansas City School of Pharmacy to enable the pharmacist to provide the required oversight of the senior pharmacy students that provide the in-home visit.

The collaboration with VNA, TRIA, and UMKC School of Pharmacy on the pharmacy program is beneficial for all parties. As a designated rotation and preceptor site, TRIA understands the needs of the school and the students who have chosen the VNA Pharmacy program as part of their community rotation. Two TRIA Pharmacists are designated as coordinators for the VNA pharmacy program and students, meaning there is a knowledgeable staff person at all times in case one is absent for vacation or illness. TRIA staff pharmacy licenses in Missouri and Kansas meet state requirements for student oversight.

The program is an excellent example of both integration and coordination of care. Integration is a plan component by virtue of the communications and medication planning between the patient, their physician(s), and the hospital, home health, and pharmacy staffs.

This program was funded by a grant from the Health Care Foundation of Greater Kansas City.

PROJECT DESCRIPTION:
In 2014, an in-home pharmacist grant was submitted with the objective of improving health outcomes by increasing medication education, lowering medication discrepancies, and lowering rehospitalization for Medicare patients with CHF, COPD, diabetes, and those patients taking eight or more medications.

A partnership was developed with UMKC School of Pharmacy to include the in-home pharmacist programs as an option in the community rotation for senior level students. TRIA Health was contracted by VNAKC to provide preceptor and pharmacist supervision to the students.

The in-home pharmacist program provides an innovative education opportunity for the pharmacy interns as well as a significant savings to the health care system overall ($342,000 with 228 patients seen by a pharmacist in the first year.)

The program is easily replicated and information on partnerships, outcomes, case studies and patient/student satisfaction will be provided.
RESULTS
Program Activities and Outcomes

- **Patient Identification** – more than 450 patients were identified as viable candidates for the program, 228 visits were made to patients in their home.

- 2,361 medications were reviewed (an average of 10 medications per patient) by the pharmacist interns or pharmacist preceptor.

- 464 medication discrepancies were discovered between December 2014 and May 2015. A medication discrepancy is an error of omission on a medication the patient is currently taking that is not reported to the nurse or listed on the medication list.

- 117 medication changes were recommended to physicians and those changes resulted in more than $69,000 in prescription savings. Medication changes are listed as changing to a generic substitute, less expensive substitutions or discontinuing a medication that is no longer needed.

ACHIEVEMENTS:
The visiting in-home pharmacist program has achieved a significant health care savings during the first year.

- $69,360 in prescription savings.
- $273,604 in health care savings (services/costs avoided).

Patient satisfaction:

- 32 percent of patients completed a patient satisfaction survey (74 out of 228 patients).
- 81 percent of patients stated they were very satisfied to extremely satisfied with the consultation from the pharmacist.
- 95 percent of patients felt the information provided by the pharmacist was useful.
- 82 percent of patients stated they knew more about their medications as a result of the pharmacist’s consultation.

The VNA nursing and therapy staff stated they have an increased knowledge of medications and discrepancies through the increased communication with the pharmacist on their patient’s medication regime.

The program generated interest from The Joint Commission and other VNA organizations throughout the country. The opportunity for the program to be replicated in other areas throughout the country was a specific point of interest and further conversations have taken place on how to put a program team together with other VNA organizations.

BARRIERS TO IMPLEMENTATION:
Several important discoveries and lessons have been learned during the first year for the project.

- The VNA Pharmacy In-Home one-month rotation was a new addition to the list of available rotations and without the prior experience of other students, not as many students as estimated signed up for the rotation. The program has been increased to a two-month rotation and the 2015/16 positions were filled.

- The number of visits to the patient’s home has been adjusted. The students prefer to visit a home in tandem to enhance the learning experience. As a result, approximately 50 percent of the visits we estimated have been achieved for the year.

- Student experience has shown a higher than anticipated amount of time spent researching the patient’s medication, in chart review and reconciliation of medications.

- Student experience has shown an increased amount of time spent in the home during the visit to gain patient trust, interview, and educate the patient on their medications.

- Patients are receptive of the program and appreciate the education on the medication and its purpose in the disease process.

- VNA and TRIA have not fully utilized phone interviews to the fullest extent and will increase usage in the future possibly as a follow-up after an initial visit and also with the patients who reside a considerable distance from the corporate office to decrease the amount of time spent in transit.

- The internal referral process to the pharmacy program needs to be modified and streamlined to include better succinct patient information to the pharmacist.

- Pharmacist recruitment: After an extensive search for a part-time pharmacist, an agreement was established with TRIA Health to provide oversight to the students and work in collaboration with the VNA on a consultant basis.

- Proper patient referrals: Currently, the process of identification of potential patients is cumbersome and relies heavily on the home health care admission nurse referring a patient to the program. VNA is working toward an automatic referral if the patient qualifies based on the program criteria (diagnosis and number of medications). This will increase the number of potential patients pre-qualified for the program and the need to be contacted to schedule a consultation.

- EMR system communication between TRIA and VNA: Both organizations use different Electronic Medical Record systems that are not compatible. VNA has created a separate database to house all demographic information for the pharmacy.
patients outside of the EMR system. This requires duplication of records but provides accurate data. The TRIA system is used to calculate outcomes and savings information.

- Higher levels of medication discrepancies after admission to VNA services. Patients failing to mention minor over-the-counter drugs such as Tums, Aspirin, Fish Oil, etc. to their nurse upon admission to VNA service results in a discrepancy in medications, meaning the medication list does not contain all medications the patient is taking.

- Patient declining the visit from pharmacist: The rate of non-admission to the program is about 50 percent—patients either do not want a visit from the pharmacist, do not see the need for additional education, the patient has been discharged, or placed back in the hospital before a visit is scheduled by the pharmacist. Talking points for overcoming denials will be provided to the student interns and home health care admission nurses to lower this statistic.
VALUE BASED PURCHASING: WHAT IS IT AND ARE YOU READY?

AGENCY:
Partners HealthCare at Home, eastern Massachusetts.

AGENCY DESCRIPTION:
Partners HealthCare at Home is part of Partners HealthCare System, co-founded by Massachusetts General Hospital and Brigham and Women's Hospital, serving eastern Massachusetts. Together, Partners HealthCare at Home and the Spaulding Rehabilitation Network constitute the non-acute care services division of Partners HealthCare. The system is committed to delivering compassionate care across the health care continuum to improve quality of life for persons recovering from, or learning to live fully with, illness, injury, and disability.

POPULATION IMPACTED:
The populations impacted by this project are Medicare beneficiaries served by Partners HealthCare at Home.

STRATEGIC PARTNERS:
A strategic partner in this program is Strategic Healthcare Programs (SHP).

PROJECT DESCRIPTION:
Home Health Value Based Purchasing (HHVBP) is a new CMS Pay for Performance program linking payments to improved outcomes. This project was designed to ensure adequate understanding of the Home Health Final Rule for CY2016, and provide insights as to how best to prepare. The agency studied the key measures, assessed current performance, opportunities for selective and targeted improvement based on ability to operationalize, and expected quantitative/financial impact.

PROJECT GOALS:
1. Identify the components to HHVBP defined in the Final Rule as well as lessons learned from the Hospital VBP program.
2. Illustrate the methodology for the calculating the Total Performance Score (TPS) and how to understand the current ratings and planning for improvement.
3. Identify the actions one agency addressed in operational and workflow considerations to be successful under HHVBP.

RESULTS:
To date, the agency has assimilated information to clinical teams, ensured that clinical managers understood the relative performance of their teams, as well as individual clinicians, and begun the process of rolling out specific interventions designed to result in team-level improvements. Financial modeling has aided in decision/analytical support.

OUTCOME MEASURES (as illustrated on page 36):
- Performance scores by team and clinician relative to benchmarks.
- Interventions and process improvement initiatives with specific measurable goals to influence financial reimbursement in HHVBP.

BARRIERS TO IMPLEMENTATION:
- Multiple competing priorities.
- Methodology complexity.
- Inclusion of new previously unrecorded measures.
- Any further modifications to HHVBP by the Centers for Medicare and Medicaid Services.
<table>
<thead>
<tr>
<th>HHVBP HHCAHPS Questions</th>
<th>SHP</th>
<th>PNH</th>
<th>North Region</th>
<th>South Region</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Care of Patients</strong></td>
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</tr>
<tr>
<td>Q9. * In the last 2 months of care, how often did home health providers from this agency seem informed and up-to-date about all the care or treatment you got at home?</td>
<td>74%</td>
<td>76%</td>
<td>73%</td>
<td>81%</td>
</tr>
<tr>
<td>Q16. * In the last 2 months of care, how often did home health providers from this agency treat you as gently as possible?</td>
<td>92%</td>
<td>62%</td>
<td>90%</td>
<td>92%</td>
</tr>
<tr>
<td>Q19. * In the last 2 months of care, how often did home health providers from this agency treat you in a way that was easy to understand?</td>
<td>95%</td>
<td>90%</td>
<td>99%</td>
<td>95%</td>
</tr>
<tr>
<td>Q24. * In the last 2 months of care, did you have any problems with the care you get through this agency? (yes to lower is better)</td>
<td>5%</td>
<td>4%</td>
<td>5%</td>
<td>3%</td>
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<td><strong>Communication Between Providers &amp; Patients</strong></td>
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<tr>
<td>Q2. When you first started getting home health care from this agency, did someone from the agency tell you what care and services you would get?</td>
<td>97%</td>
<td>96%</td>
<td>94%</td>
<td>97%</td>
</tr>
<tr>
<td>Q15. * In the past 2 months of care, how often did home health providers from this agency keep you informed about when they would arrive at your home?</td>
<td>80%</td>
<td>78%</td>
<td>73%</td>
<td>79%</td>
</tr>
<tr>
<td>Q17. * In the past 2 months of care, how often did home health providers from this agency explain things in a way that was easy to understand?</td>
<td>84%</td>
<td>87%</td>
<td>83%</td>
<td>87%</td>
</tr>
<tr>
<td>Q18. * In the past 2 months of care, how often did home health providers from this agency listen carefully to you?</td>
<td>85%</td>
<td>88%</td>
<td>89%</td>
<td>85%</td>
</tr>
<tr>
<td>Q22. In the past 2 months of care, when you contacted this agency’s office did you get the help or advice you needed?</td>
<td>94%</td>
<td>95%</td>
<td>94%</td>
<td>100%</td>
</tr>
<tr>
<td>Q23. When you contacted this agency’s office, how long did it take for you to get the help or advice you needed? (same day)</td>
<td>77%</td>
<td>78%</td>
<td>73%</td>
<td>69%</td>
</tr>
<tr>
<td><strong>Specific Care Issues</strong></td>
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</tr>
<tr>
<td>Q3. When you first started getting home health care from this agency, did someone from the agency talk with you about how to set up your home so you can move around safely?</td>
<td>84%</td>
<td>84%</td>
<td>83%</td>
<td>86%</td>
</tr>
<tr>
<td>Q4. When you started getting home health care from this agency, did someone from the agency talk with you about all the prescription medicines you were taking?</td>
<td>91%</td>
<td>62%</td>
<td>93%</td>
<td>91%</td>
</tr>
<tr>
<td>Q5. When you started getting home health care from this agency, did someone from the agency ask to see all the prescription medicines you were taking?</td>
<td>86%</td>
<td>83%</td>
<td>86%</td>
<td>85%</td>
</tr>
<tr>
<td>Q10. In the past 2 months of care, did you and a home health provider from this agency talk about when you were taking these medicines?</td>
<td>91%</td>
<td>90%</td>
<td>90%</td>
<td>90%</td>
</tr>
<tr>
<td>Q12. In the past 2 months of care, did home health providers from this agency talk with you about the purpose for taking your new or changed prescription medicines?</td>
<td>86%</td>
<td>86%</td>
<td>87%</td>
<td>81%</td>
</tr>
<tr>
<td>Q13. In the past 2 months of care, did home health providers from this agency talk with you about when to take these medicines?</td>
<td>78%</td>
<td>80%</td>
<td>79%</td>
<td>89%</td>
</tr>
<tr>
<td>Q14. In the past 2 months of care, did home health providers from this agency talk with you about the important side effects of these medicines?</td>
<td>65%</td>
<td>71%</td>
<td>70%</td>
<td>68%</td>
</tr>
<tr>
<td><strong>Global type Measures</strong></td>
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<tr>
<td>Q20. What number would you use to rate your care from this agency’s home health providers? (score of 10)</td>
<td>68%</td>
<td>71%</td>
<td>67%</td>
<td>81%</td>
</tr>
<tr>
<td>Q25. Would you recommend this agency to your family or friends if they needed home health care?</td>
<td>30%</td>
<td>83%</td>
<td>83%</td>
<td>85%</td>
</tr>
</tbody>
</table>
**BUNDLED PAYMENTS: RIGorous Focus on QUALITY AND PATIENT SAFETY WILL IMPROVE PATIENT OUTCOMES AND ENSURE FINANCIAL SUCCESS**

**AGENCY:**
Penn Home Care & Hospice Services, Bala Cynwyd, Pennsylvania.

**AGENCY DESCRIPTION:**
Penn Home Care & Hospice Services consist of Penn Care at Home and Caring Way, both Medicare-certified and Joint Commission-accredited home health care agencies. The agencies offer the full range of home care services including skilled nursing, physical therapy, occupational therapy, speech therapy, social work services, and home health aids. Included in this entity is Wissahickon Hospice, a Medicare certified and Joint Commission-accredited hospice agency. Wissahickon Hospice also operates Penn Hospice at Rittenhouse, a 20-bed hospice inpatient unit used for short term symptom management and respite care.

**POPULATION IMPACTED:**
Patients receiving a joint replacement at Penn Presbyterian Medical Center that are being discharged directly from the acute care setting to Penn Home Care & Hospice.

**PROJECT DESCRIPTION:**
Home care plays a vital role in the orthopedic care pathway in reducing hospital length of stay, reducing readmissions, and improving health and function for patients that have undergone joint replacement surgery. This orthopedic care pathway was developed in response to the bundle payment initiative. This session will summarize the operations and clinical care associated with the orthopedic care pathway as well as the financial and quality metrics used to gauge its success.

Penn Medicine Orthopedics is regionally/nationally recognized for being highly skilled and highly specialized. The implementation of the lower major joint bundled payment initiative, prompted the orthopedic team at Penn Presbyterian and Penn Care at Home to strategically redesign our methods of care delivery across the care continuum. The goal for the project was to focus on improving the value of the care we provide by improving quality and patient safety, while reducing costs.

The project focused on all patients receiving a lower major joint replacement at Penn Presbyterian hospital. The project team set out to discharge more patients to home care services than to in-patient rehab. The research literature supports that an early return home, following a joint replacement, while the patient is supported by home care services, has a positive impact on patient satisfaction and improved patient outcomes. In order to do this, operational processes were put in place at Penn Presbyterian and Penn Home Care. These processes included preoperative discharge planning, a pre-operative social work assessment, referral placed to Penn Home Care & Hospice (for skilled nursing and therapies), and the scheduling of the first home care visit taking place prior to surgery.

**RESULTS:**
The metrics used to track success were:

- Number of patients discharged to home vs. inpatient rehab
- Therapy and nursing response times
- Knee ROM
- Timed Up and Go Measurements (TUG)
- Boston Activity Measure for Post-Acute Care (AM-PAC) measurements taken by PT and OT at evaluation, discharge.
- Readmission rate
- Number of home care visits by discipline
- Net Revenue
- CMI

**OUTCOME MEASURES:**
The project started in November 2014 and is ongoing. More than 80 percent of the patients were seen in less than 24 hours (from the day of hospital discharge) by both the home care nurse and physical therapist. Improvements were seen in knee range of motion and TUG scores. Readmission rates were lower than the historical average for orthopedics at Penn Presbyterian. The cost of care was lower than the historical average for patients receiving a new joint at Penn Presbyterian. This project demonstrated how coordinating care across multiple entities can improve patient outcomes while reducing cost.

- Home Care response times have improved so that more than 80 percent of the patients were seen in less than 24 hours, from the day of hospital discharge, by both the home care nurse and physical therapist.
- TUG scores went from 41 seconds to 13 seconds
- AMPAC scores
  - Basic: 46.45 - limited indoor mobility to 53.80 - moving around indoors
  - Daily activity: 52 - daily tasks a struggle to 64.09 - getting things done
• **Readmissions Reductions** - Readmissions went from four percent to two percent resulting in estimated savings for the readmission reduction is $57,000, based upon the average cost per readmission of $15,000.

• **Utilization of Skilled Nursing Facility and Inpatient Rehabilitation Facility Usage**

**BARRIERS TO IMPLEMENTATION:**
- Number of patients discharged to home vs. inpatient rehab
- Therapy and nursing response times
- Knee ROM
- Timed Up and Go Measurements (TUG)
- Boston Activity Measure for Post-Acute Care (AM-PAC) measurements taken by PT and OT at evaluation, discharge.
- Readmission rate
- Number of home care visits by discipline
- Net Revenue
- CMI
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