



# Health Care Transformation Task Force Member Case Studies

**Care Management Programs to Serve High-Need, High-Cost  
Populations**



# Montefiore

## Care Management Case Study

# Montefiore Health System's Care Management



*Located in the Bronx and Hudson Valley, New York, Montefiore Health System (MHS) serves one of the poorest and most disproportionately disease-burdened counties in the nation with nearly 80% of the payer mix from Medicare and Medicaid. The integrated delivery system includes 10 hospitals and nearly 200 primary care, school-based, and other specialty care sites.*

## Background

Montefiore has been a leader in payment and delivery reform pursuing value-based reimbursement in both the public and private sectors. Montefiore operates one of the most financially successful Pioneer ACOs in the nation, and provides population health and care management services to approximately 400,000 patients through full-risk and shared savings arrangements.

## Program Description

The Montefiore Integrated Provider Association (MIPA) is an organization of more than 3,900 MHS-employed and community-based providers. The Montefiore Care Management Organization (CMO) is a robust health care management company that delivers care management services to patients with complex illnesses, coordinating seamlessly with on-site care delivered in acute and post-acute settings. The CMO also supports its network by providing patient education, provider relations, credentialing services, community health programs, data analysis and reporting, financial and customer services.

## Care Management Strategies

The CMO identifies high-need, high-cost patients within the managed population through data mining, self-referral, and provider referral. Once identified, Montefiore staff contacts these individuals to arrange a comprehensive biopsychosocial assessment. An Accountable Care Manager (ACM), who is either a nurse or social worker, administers the assessment using motivational interviewing techniques. The assessment evaluates issues related to aging, cognitive and functional status, psychosocial stressors, caregiver supports, behavioral, and end of life planning needs.

Upon completion of the assessment, care managers compile a list of patient needs linked to specific interventions, which becomes the basis for a personalized care plan. The ACM reviews the personalized care plan with the patient and/or caregiver to obtain input and establish realistic goals. Interventions are then tracked within the CMO's automated care management system to ensure follow-through. The patient's primary care provider receives a summary of the issues identified upon completion of the assessment, along with a set of recommendations and actions to be taken by the ACM and patient or caregiver. There is regular communication between the care guidance team, patient/caregiver, and physician for as long as the patient requires care management.

Interventions and resources available to the ACM include:

- **Chronic care management programs for diabetes, heart failure, asthma/chronic obstructive pulmonary disease:**  
The CMO's comprehensive chronic care management programs use patient identification algorithms and



stratification criteria that permit targeting of interventions to individuals based on the severity of their disease. CMO physicians, ACMs, certified diabetic educators, and pharmacists work closely with providers to reinforce the use of evidence-based guidelines to create optimal treatment plans and promote patient adherence with the treatment plan. Interventions include regular telephonic contact with the care guidance team, tele-monitoring, educational mailings, and in-person individual and/or group education sessions.

- **Tele-monitoring:** The CMO utilizes tele-monitoring with individuals in its chronic care management programs for heart failure and diabetes and in other high-risk cohorts, including a small cohort of at-risk, frail, community-dwelling elderly.
- **Medication reconciliation, adherence and optimization:** The CMO employs pharmacists who work closely with ACMs, PCMH teams, inpatient and specialty providers, and patients/caregivers to review and resolve medication-related issues and provide patient education. Interventions include: assisting in attaining target dose levels of key medications for conditions such as heart failure and depression; recommending strategies to achieve better levels of medication adherence; reviewing regimens involving polypharmacy; and assisting patients facing financial barriers to adherence.
- **Linkage to community support services and entitlement programs:** Based on identified patient need, referrals are made for services/programs such as adult day care, Meals on Wheels, transportation, caregiver support, and senior centers. In addition, screening is conducted to determine eligibility for entitlement programs, such as Medicaid, and support is provided to facilitate the application process.
- **Behavioral health management:** The assessment process screens for depression, at-risk drinking, and history of other behavioral health disorders. ACMs work with PCPs to incorporate treatment of these issues into the patient's care plan, including assisting with the coordination of referrals for treatment and/or community-based services when appropriate.
- **Life care planning and advanced illness management:** The assessment process screens for the appropriateness of palliative care for pain and symptom management and/or hospice for end of life care. The majority of CMO clinical staff have received certification through the End of Life Nursing Education Consortium (ELNEC).
- **Inpatient care monitoring:** At Montefiore, hospital-based case managers are automatically alerted when a patient covered by a capitated or shared savings contract is admitted. The hospital-based case manager works closely with the interdisciplinary inpatient team to identify the root causes of admission and readmission, participate in patient and caregiver education, facilitate discharge planning, and communicate with the PCP and the CMO-based ACM.
- **Caregiver support:** In cases where the ACM is working with a caregiver, interventions to help reduce and avoid caregiver "burn-out" are enacted. This can include having a care manager interact with the caregiver on a regular basis, helping to arrange for respite services, and referring caregivers to support groups.



## Findings

Montefiore's Pioneer ACO is one of the most successful across the country. It has generated an average annual savings of approximately 6% from benchmark and was the most financially successful Pioneer ACO in Performance Years 1 and 2, saving 7% and 7.1%, respectively.

Montefiore has also been successful in managing complex patients who are commercially insured. For example, it reduced the diabetes admission rate for one commercial insurer from 343 per 1,000 to 299 per 1,000 from 2009 to 2014.



## Care Management Case Study

# WakeMed Key Community Care's Complex Care Program with Evolent Health



*Located in the competitive health care market of Raleigh, North Carolina, WakeMed Key Community Care (WKCC) is an ACO formed by WakeMed Health & Hospitals and Key Physicians in 2013. With both commercial and Medicare contracts, WKCC is focused on enhancing the quality and coordination of care for patients, especially the chronically ill, in the Triangle area.*

## Background

In addition to WakeMed Key Community Care's ACO network of more than 220 independent primary care physicians and a leading health system with another 500 providers, WKCC's efforts are supported by Evolent Health, a partner for providers transitioning to value-based care and a member of the HCTTF. Evolent Health is a key partner in the ACO and supports WKCC's clinical, operational, and financial accountable care efforts. In collaboration with Evolent, WKCC developed an initiative to achieve higher value for high-risk patients called the Complex Care Program, which is central to their ACO strategy.

## Program Description

WKCC's Complex Care Program is an initiative meant to identify and manage high-need, high-cost patients that require more extensive care coordination needs. The Complex Care Program is supported by the ACO's organizational and operational model. The model serves to align financial, clinical, and executive leadership both from strategic and operational perspectives to successfully deliver financial return and improved clinical outcomes under a value-based care paradigm. This model has demonstrated a high degree of replicability of its governance and its physician alignment approach in diverse environments among other partner health systems.

A critical component to the model's success is the information system's ability to assure that data from clinical (e.g. EMRs, lab, pharmacy) and administrative (e.g. claims) sources integrate across the care continuum. Integration initiatives that optimize multiple electronic medical records systems are the highest information systems development priority at WKCC.

## Care Management Strategies

WKCC's Complex Care Program uses an innovative approach for targeting high-risk patients with more extensive care coordination needs, including predictive modeling and advanced stratification methods to identify chronic patients (e.g., diabetes, coronary artery disease, congestive heart failure, COPD, asthma) with the highest likelihood of having an avoidable acute event in the 12 months following identification.

Central to the program is the care advisor who regularly engages with the primary care team on-site regarding services needed for the patients. Physician engagement, clinical guidance, and patient feedback are the keys to successfully managing chronic conditions, along with collaboration among the care advisor, the dietitian, the pharmacist, and behavioral health providers.



The program is focused on behavior change and motivation, engaging patients in setting their own goals and graduating them when they achieve their goals. A patient-centered, whole-person view is emphasized to address not only the diseases in question but also other drivers of poor outcomes such as behavioral health issues, psychosocial factors, finances, and living situation.

Patients participate in the Complex Care Program for less than six months on average. The program emphasizes a short timeframe, driving to measurable results quickly while tracking the process measures, including: (1) Initial care planning within 30 and 60 days of identification; (2) Care planning visits with the primary care physician; (3) Extended care visits which include those with a pharmacist, social worker, or nutrition educator; and (4) Engagement as measured by number of telephone or in-person contacts per month. WKCC considers continued tracking to be a high priority in order to further understand the relationship between the process measures and the outcomes measures of per member per month spend and inpatient utilization.

## Findings

A case-control study of WKCC's Complex Care Program for the ACO's MSSP beneficiaries showed a 35% reduction in acute inpatient days per thousand and a concurrent 25% reduction in acute inpatient spend ( $p < 0.05$ ), key indicators of improvement in quality of life for WKCC's patients. Outpatient utilization did not decrease in terms of emergency department (ED) visits, primary care visits, and specialist visits.

WKCC's organizational and operational model has had the broader impact of reinforcing the structure of the MSSP ACO model to benefit both Key Physicians and WakeMed through the sharing of technology, infrastructure, people, and processes. These structural configurations have resulted in the physician engagement, and the formation of information systems and best practices that have been crucial for the Complex Care Program to achieve favorable results.

In addition to a significant reduction in acute inpatient cost and utilization, a quantitative analysis shows favorable trends for graduates of the WKCC MSSP Chronic Care Program compared to a control group matched on age, gender, comorbidities, months of health plan eligibility, and a propensity score based on 12 months of historical health care costs and utilization.

These trends include:

- A 18% reduction in total (acute and sub-acute) inpatient admissions with a concurrent 22% reduction in total inpatient spend;
- A 11% increase in PCP visits paired with a 18% increase in PCP spend; and
- A 9% reduction in total medical spend.

*The qualitative case studies of patients in the Complex Care Program reinforce the successful cost and utilization outcomes. For example, a patient was identified for high ED utilization (nine visits 2014, seven in 2015 prior to May). The diagnoses were hypertension Irritable Bowel Syndrome (IBS), atrial fibrillation, dementia, and acid reflux. The PCP indicated this was one of his most challenging Medicare beneficiaries. The patient was compliant with every three month PCP visits; however, despite the counsel to call the PCP prior to going to the ED, the patient repeatedly used emergency services for non-urgent complaints. The care advisor met with the patient in the PCP office and helped schedule monthly PCP visits and frequent telephonic check-ins to reinforce the importance of consistent PCP services. After beginning this intervention, the patient called the PCP prior to seeking emergency care and he has not utilized the ED since May 2015. The care patterns in this case study are representative of the overall effectiveness of the Complex Care Program.*





GREENVILLE  
HEALTH SYSTEM

## Care Management Case Study

# Greenville Health System Care Coordination Program



*Greenville Health System is the largest multi-hospital health system in South Carolina. It is a nonprofit, patient-centered, teaching and research institution. The system has 1,268 licensed beds, 1,271 affiliated and employed medical staff, and 10,925 employees dispersed throughout five medical campuses and a variety of outpatient and specialty facilities. Its seven residency and seven fellowship programs provide training for physicians, and nursing and allied health students.*

*In December 2014 Greenville Health System (GHS) launched a nine-county, physician-led health care provider collaboration called My Health First Network. The affiliation of 1,850 providers from GHS, Baptist Easley, Self Regional Healthcare, Abbeville Regional, Newberry, and independent physicians enable optimal collaboration on best practices and consistency in health care delivery.*

*With Medicare, Medicaid, and commercial contracts, Greenville Health System (GHS) and My Health First Network (MyHFN) focus their efforts to help control escalating health care costs and improve quality of care for patients in the upstate region of South Carolina.*

## Background

Greenville Health System's Care Coordination Program is based on a population health model of care that provides care coordination across the continuum of care. The goal of the program is to optimize the triple aim by improving the health and quality of care for populations, engaging patients to improve their quality of life and health care experience, and coordinating care to provide the right care at the right time in the right place, therefore reducing costs and avoidable utilization. The program has multiple levels and points of entry from complex care management, including transitions in care to disease and lifestyle management concentrating on the individual patient wherever they may be on the care continuum.

## Program Description

Greenville Health System uses an integrated and proactive approach to population health using a value based model that improves health and quality of care while managing costs. Care coordination and care management supported by integrated information technology enables seamless care throughout the continuum of health care from catastrophic and complex acute care management and disease management to lifestyle and wellness management. The overall goal of GHS care management is to foster health improvement in a patient-centered and clinically responsive environment.

The complex care management component utilizes predictive risk analysis tools to identify complex patients that have multiple chronic diseases and high utilization that require extensive care management and care coordination interventions. This risk analysis also allows GHS to identify those patients that are predicted to incur high costs and increasing utilization in the future to allow early intervention and care coordination to avoid unnecessary cost and health burden.



The transitional care component targets patients that are in acute care and are a high risk of readmission, poor outcomes, and increased utilization. Face-to-face contact with the acute patient and family/caregiver while hospitalized sets the stage for seamless hand-offs and continuity. These patients are managed across a thirty to ninety day intensive course to avoid re-hospitalization, improve outcomes, and coordinate care to the appropriate sub-acute, out-patient or community resource. Interventions targeted at the patients specific needs allow patients to transition through levels of care seamlessly and without complication.

The disease management component uses condition management registries to manage patients with at least one chronic disease. The program's goals are to educate patients about their condition, guide the patient through the health care system, and create a self-care plan that is patient centered and supported by the family, caregiver and physicians.

GHS utilizes key stakeholders and physicians in the development of best practice guidelines and clinical pathways for quality driven care. Seamless referral from one level of care to the next is a key element to guiding the patient through the complex health care environment.

## Care Management Strategies

The care coordination team approach comprised of various skill levels including Registered Nurses, social workers, health coaches, and community health workers is key to GHS's care management success. The care managers are located in physician practices and are strategically placed geographically with a team comprised of RNs, social workers, and disease managers / coaches to enable timely interventions and collaboration with the physicians and help promote point of care strategies. Using an innovative care management tool, the care managers are able to comprehensively assess and create a longitudinal plan of care that follows the patient throughout the health care continuum. This tool also promotes culturally appropriate assessments to maximize patient values, preferences and life situation. The care management platform allows the care manager to create a care team that includes multi-disciplinary roles such as family and caregivers, pharmacists, diabetic educators, disease specific navigators, social and behavioral services, and nutritionists allowing a whole patient approach for input, management, and continuity while avoiding duplication of care.

Patient engagement is managed through face-to-face visits at the physician office or in the home when appropriate and telephonically for follow-up. The care managers and disease management coaches use motivational interviewing techniques and teach-back methods for optimal engagement. The patient care plan is created with the patient, the family and caregiver, the physician, and care team to provide a holistic and patient-centered path to optimal health. Patients are encouraged to use the system-wide patient portal for shared input and decision making.

This value-based model of care and the patient engagement strategies are shared throughout My Health First Network to promote integration of technology, best practices, critical pathways, and processes. This is accomplished through the network governance structure with regional steering committees and care management work groups reporting up through the network quality and care model committee and board. This enables key physician involvement and support for the care coordination program.



Other important care management program strategies and components at GHS include:

- Specialized training in palliative care, hospice needs and timely referrals
- Diabetes self-management programs
- Tele-monitoring programs for diabetes and heart failure
- Partnerships and close relationships with many community-based programs and services
- Care giver support through a Reach grant and TCARE initiatives
- Accountable community programs including paramedic outreach to under-served populations and the GHS mobile health clinic serving these neighborhoods
- Nurse triage services for after-hour calls to divert unnecessary emergency department visits and costs
- Collaborative pharmacy programs for medication reconciliation and “Med to Bed” program

## Findings

The value-based population programs at GHS continue to evolve with Medicare Shared Savings Program (MSSP) and commercial contracts. Data collection is on-going.

The longest running shared savings arrangement with a Medicaid Managed Care Program has shown significant improvements:

Results comparing the year prior to program implementation (2012-2014) include:

- Inpatient utilization/1000 decreased 25%
- Emergency department utilization/1000 decreased 33%
- 30-day all-cause readmissions decreased 20%
- Wellness/preventative visits per member increased 300%
- Prescriptions/member decreased 14%
- Percent generic utilization increased 8%
- Significant shared savings realized at 2013 and 2014 years end
- Discharge satisfaction increased from 83.9% to 93.9%
- Transitions of Care satisfaction increased from 52.2% to 62.3%



# aetna<sup>®</sup>

## Care Management Case Study

# Aetna's Compassionate Care Program for Advanced Illness



*Aetna is one of the nation's leading diversified health care benefits companies, serving an estimated 44 million people with information and resources to help them make better decisions about their health care. Aetna offers a broad range of traditional, voluntary and consumer-directed health insurance products and related services, including medical, pharmacy, dental, behavioral health, and group life and disability plans. Their goal is to build a simpler, more integrated health care system that makes the right care at the right time possible, with less duplication and hassle.*

## Background

Aetna's long-standing Compassionate Care Program is designed to improve the quality of patient care for individuals with life-threatening illnesses by helping patients get access to palliative care and hospice benefits. Key to the success of this program is Aetna's highly trained case managers who work with patients and their families to make life better for patients with advanced illness.

## Program Description

Through this initiative, Aetna offers complex case management to members with serious illness who are enrolled in the Aetna Compassionate Care Program (ACCP). The ACCP focuses on helping people understand pain management and other palliative care options, and enables them to make more informed decisions about how to spend their final days, at no additional cost to members.

The foundation of the ACCP, which also provides a direct benefit to patients, is the liberalization, or relaxation of restrictions, of the hospice benefit. In 2004, Aetna liberalized its hospice benefit with a group of commercial plan sponsors, finding that liberalizing the hospice benefit, along with the use of case management did not increase costs. As a result, this construct is now standard for Aetna's commercial business, except for Medicare Advantage due to CMS' coverage and payment rules for hospice care.

Today, the ACCP removes barriers to accessing hospice care by eliminating the requirement that commercially-insured members stop curative treatment to be eligible for hospice benefits. Aetna offers concurrent hospice and disease-directed treatment in commercial plans for members with a prognosis of up to 12 months, in contrast to the standard Medicare hospice benefit requirements of a prognosis of six months.

## Care Management Strategies

Members are identified in several ways: (1) a predictive model developed by Aetna; (2) a concurrent review and precertification process; (3) member self-referrals from program information featured in member newsletters; and (4) physician referrals. Case managers complete a comprehensive assessment of the patient's needs by telephone, and consult with the patient, physician, and patient's family.

The success of the ACCP is due to the efforts of the dedicated and experienced case managers who are able to



develop trusting and meaningful relationships with Aetna members and their families at a time when they are most vulnerable and in need of assistance. Case managers serve as the liaison between the medical practices and Aetna's care management resources. Nurse case managers are trained to manage patients with multiple chronic conditions, depression, dementia, advanced illness, or palliative care needs. This training includes dealing with the unique and often difficult circumstances associated with advanced illness. Case managers provide education and support, give assistance with pain medications and psychosocial needs, and help ensure that advance directives are in place and followed. In addition, they can also coordinate home and community-based care services, help members monitor their health conditions, identify barriers to care, and address issues arising in care transitions.

Initially, Aetna relied on a telephonic system for care management, but it is gradually transitioning to a model where the case managers are embedded in the physicians' practices. This collaborative care model has proven to be more effective than remote case management alone, as clinicians and case managers work together to better identify and serve patients in need. Also, being embedded in the practices provide the case managers the ability to interact directly with the patients and physicians' staff.

## Findings

In Aetna's experience, a key ingredient to success is selecting, training, and mentoring good case managers. Case managers often develop a close relationship with members, and the depth of this connection is valued by members and their families. Additionally, these nurses find this important work highly rewarding.

For members enrolled in the ACCP, there is:

- Tripling of the hospice election rate;
- More than doubling of the average hospice length-of-stay;
- 82% reduction in acute inpatient days;
- 86% reduction in intensive care unit days;
- 77% reduction in emergency department visits; and
- A high level of satisfaction among members and families.



**Blue Shield of California**

An independent member of the Blue Shield Association

## Care Management Case Study



# Blue Shield of California's Innovative Care Model



*Blue Shield of California is a not-for-profit health insurance plan dedicated to providing Californians with access to high quality care at an affordable price.*

## Background

As an insurer, Blue Shield (BSCA) of California sees value in deepening provider partnerships. The biggest opportunity to impact quality, member experience, and affordability of care is through the “Integrated Care Model”: “Extensivists” focusing on (1) advanced facility care, (2) home care, (3) high-risk clinics, and (4) care management and coordination across all settings. Top performing provider delivery systems have six essential elements of care—the Extensivists plus optimized primary and collaborative specialty care. BSCA seeks to consistently implement these components through its ACO partners across all lines of business.

## Program Description

When a patient requires medical care either at a hospital, a Skilled Nursing Facility (SNF), rehabilitation center, or the Emergency Department (ED), advanced facility care initiatives can help to decrease the length of time a patient spends in one of these facilities, make certain they receive optimal care delivery, coordinate their care, and further ensure they do not return to the inpatient setting again.

## Care Management Strategies

The following are the four key components of BCBA's innovative integrated care model.

### ***Advanced Facility Care***

Successful advanced facility care includes the following components:

- ***Robust Hospitalist Program:*** A physician dedicated to delivering comprehensive medical care exclusively in a hospital setting sees patients in the emergency room prior to their admission in order to assess if the admission is appropriate or can be handled at a lower level of care. In addition, hospitalists round daily with both an inpatient care manager specializing in care transition and intimate coordination with an outpatient care management team to coordinate the patients care while they remain in the hospital and to prepare for their discharge.
- ***Readmission Prevention Program:*** Evidence-based programs and daily review of readmissions are used to identify members who may be at a high risk for readmission and to determine cause and mitigate future risk of reoccurrence. These programs include comprehensive discharge planning and care transitions.
- ***Inpatient Care Management Program:*** Case managers, located in the hospital, are dedicated to managing a patient from pre-admission to discharge.
- ***Skilled Nursing Facility (SNF) Program:*** The SNF has full staffing and admits patients 24 hours per day and seven days per week. Together, a care manager and a SNF professional have significant family meetings and provide care coordination and palliative care as appropriate.



### **Home Care**

Home care programs focus on patients who otherwise come to their usual place of care. Patient populations include the palliative care patient, home bound patients, patients in long term care, patients who require chronic dialysis, care transitions, chronically and persistently mentally ill, and short term acute stabilization. This patient population often includes socioeconomically disadvantaged, the elderly, frail, or those who are too sick to regularly tolerate travel to a physician's office or even a high risk clinic for services/care. These programs are most often led by a physician with the majority of care delivered by teams of nurse practitioners and social workers.

### **High-Risk Clinics**

A health care delivery system designed to provide care to patients with comprehensive and complex needs. Components of successful high-risk clinics are:

- *High-risk discharge follow-up visits:* Appointments available and scheduled within 24 hours of discharge. When appropriate, a patient can be seen for multiple visits.
- *Care of complex patients:* Specialized team of physicians, nurses, pharmacists, and social workers dedicated to providing care to medically complex patients with chronic conditions or long term needs. This includes group visits (diabetes, COPD, CHF), oncology program, and pain management for seniors and commercial patients, though the clinical teams are different for both.
- *Services requiring medical oversight:* These include wound care and IV infusion therapy.
- *Coumadin and other medication management clinic:* Coumadin is a medication that requires very close monitoring to ensure the levels in the blood remain in a therapeutic window. A Coumadin clinic can prevent hospitalizations and ensure patients have a place to go for close monitoring.
- *Annual wellness exams:* Yearly exams for seniors ensure proactive identification of conditions and gaps in care.
- *Care for the chronically and persistently mentally ill*
- *Cardiovascular and other disease management coordinated care clinics*

### **Care Management/Coordination**

Care management provides care to members while inpatient, outpatient, and as they transition in-between. Care management can be short term or longer term. The longer term often transitions into a high risk clinic or a home care program. Care management under the integrated care model includes:

- *Disease Management:* Patients are generally in a disease management program for 3-12 months with the goal of stabilizing/improving the patient's condition and teaching them to self-manage.
- *Complex Case Management:* A patient is typically considered complex when they have multiple conditions, are on medications that require close monitoring or they have a condition that needs to be tightly monitored or may cause a significant adjustment to their daily living.
- *Transitions of Care:* As members move throughout the care delivery system and transition from one level of care to another (hospital to home, hospital to long-term care, etc.), care management can help coordinate the care and facilitate smooth transitions. This includes screenings and preparations for patients who will be undergoing procedures or surgeries.



## Findings

BSCA's ACO partner organizations have achieved a \$325 million cost savings over the initial five years of the program. This collaboration has also demonstrated a 13% reduction in admissions and 27% reduction in total hospital days during the same period. The patient population served by this program is about 325,000 people among approximately 20 ACO partner medical groups and IPA delivery systems.

Over the past year and over the next two years, BSCA is scaling this program to cover over 500,000 patients among 40 ACO medical groups and IPA's. BSCA anticipates that the new clinical design described will achieve an additional 25% reduction in hospital admissions and even great reduction in total hospital days. This will also result in even a larger proportion of total cost of care savings throughout the multiple geographies served by the ACO medical group/ IPA collaboration.



**PBGH**  
PACIFIC BUSINESS  
GROUP ON HEALTH

## Care Management Case Study

# Pacific Business Group on Health's Intensive Outpatient Care Programs



*The Pacific Business Group on Health, a not-for-profit 501(c)(3), has led efforts to transform U.S. health care using the combined influence of some of the largest purchasers of health care services in the United States.*

## Background

As one of its initiatives to drive health care improvements, the Pacific Business Group on Health (PBGH) established Intensive Outpatient Care Programs to serve high-need, high-cost Medicare patients within 23 delivery systems in five states (Arizona, California, Idaho, Nevada, and Washington) over a three-year period ending in 2015.

## Program Description

The Intensive Outpatient Care Programs (IOCP) established a dedicated multidisciplinary team closely linked to primary care to address medical, behavioral, and psychosocial needs of patients. Based on a successful pilot for commercial patients, PBGH won a grant from CMS's Innovation Center to expand the IOCP model to the Medicare population and test the scalability of a common care model across many clinical settings.

## Care Management Strategies

To identify high-need, high-cost patients for the program, IOCP recommended a combination of predictive risk scoring with clinical judgment. If the delivery system did not have predictive software, IOCP recommended a utilization-based algorithm:

- Two or more admissions, in last year, with one in last six months
- Six or more ED visits in last year

Other stratification criteria include:

- Five or more medications
- Three or more active specialists
- Behavioral health diagnosis
- Three or more chronic conditions

Best practices included sharing the algorithm-based patient list with the PCP and asking which patients from the list they would recommend for intensive care management.

The care model must have elements (referred to as “guardrails”) implemented across the 23 delivery systems include:

- *Trained Care Coordinators:* These nurse or social worker-led teams, which can include community health workers and medical assistants, maintain a close, ongoing relationship with the patient, developing trust over time.
- *A face-to-face “supervisit”:* This visit, which must occur within one month of enrollment, enables information to be gathered with a motivational, open, and flexible approach.



- *Standardized longitudinal assessment:* The assessment includes tools for physical function, mental well-being, and patient engagement in care.
- *Monthly, bi-directional communication between the care coordinator and patient*
- *Shared Action Plan:* A plan created with the patient's own goals at its center.
- *Warm handoffs:* These connect relevant support services (e.g., home health, behavioral health, transportation, drug assistance programs, food banks, and other community services).
- *24/7 access:* Patients are offered a 24/7 access solution, with guaranteed communication to the care coordinator the next business day.

Participating delivery systems were encouraged to adapt implementation to their local environment as long as core requirements (i.e., guardrails) were met.

To participate in the IOCP, all care team members received training, but care coordinators participated in intensive training that helped them develop or sharpen skills in gaining patient trust, maintaining a close relationship, and coaching self-management support and behavior change. In addition, training sessions were directed at organizational leaders to build the organizational systems required for successful implementation such as patient identification, physician and patient engagement, and IT system support.

While the IOCP model has similarities to other new models of care, it is the unique combination of these elements that differentiated it from others.

## Findings

PBGH collected data on 15,000 Medicare patients enrolled by the 23 delivery systems over two years.

### **Patient-Centered Measures**

37% of IOCP patients moved to a higher level of activation while in the program (e.g., patient moved from PAM level 3 to level 4). Forty-five percent remained at the same level of activation and 11% moved to a lower level of activation (with the highest level having the greatest decrease). Increased patient activation was associated with patients being more likely to successfully graduate from IOCP.

The Patient Health Questionnaire (PHQ) is a multi-purpose tool for screening, diagnosing, monitoring, and measuring the severity of depression that takes only a few minutes to complete. One-third of people with a serious medical illness experience symptoms of depression, making the IOCP patient population at a higher risk for this condition. On average, patient PHQ scores improved 31%.

The VR-12 is a health-related quality of life survey that summarizes both physical and mental health functioning. Patients in IOCP saw a 4.2% increase in mental functioning and 3.3% increase in physical functioning. Any increase in these scores are particularly noteworthy as they typically decline in senior populations with a high burden of chronic illnesses.



### ***Cost and Utilization***

A program-wide actuarial analysis of a sub-set of patients continuously enrolled for at least nine months showed a significant reduction in inpatient utilization and emergency department use as a result of the program intervention, although actuarial analysis cannot distinguish the proportion due to the intervention versus regression to the mean.

Many of the delivery systems performed their own internal analyses. Perhaps most telling, once the grant program ended, 90 percent of participating delivery systems continued the core elements of the program for Medicare patients and 15 of 23 expanded programs into their commercial populations by July 2015. Some program elements varied, most notably caseloads for care coordinators which averaged 80 – 120 for Medicare patients and 200 for commercial patients.

### ***Scalability***

The care model guardrails were successfully adapted across a wide variety of provider settings – from rural IPAs to urban medical centers. The location of care coordinators varied depending on setting, but in all cases, a close working relationship with primary care clinicians supported success of the program.

Patient engagement is crucial to success. The patient engagement rate (defined by completed initial assessments and face-to-face visit) averaged 76%, and varied across the delivery systems from 30% to 99%. Best practices include care coordinators establishing the face-to-face relationship in the hospital prior to discharge, or starting the face-to-face relationship in the office with the PCP.

Ultimately, the program had a lasting impact on changing the way the participating providers practice medicine, and the way patients care for themselves.