

## Advocate Medical Group Medication Optimization in Primary Care

### Organization Description

Advocate Health Care is the largest health system in Illinois and one of the largest Accountable Care Organizations in the country. A national leader in population health management, Advocate operates nearly 400 sites of care which includes 12 hospitals, including three of the nation's 100 Top Hospitals, the state's largest integrated children's network, five Level I trauma centers (the state's highest designation in trauma care), and three Level II trauma centers. With four teaching hospitals, Advocate trains more physicians for roles in primary care and specialty care than any other health system in the state. Advocate operates one of the region's largest home health and hospice companies. Advocate Medical Group, the largest physician-led medical group in the state, provides primary care, specialty services, medical imaging and other outpatient services at more than 200 community-based medical practices throughout the Chicago and Bloomington-Normal regions. Advocate is part of Advocate Aurora Health, the 10th largest not-for-profit, integrated health system in the United States.

Advocate Medical Group developed the AdvocateCare® Center (ACC) model to provide patient-centered primary care and improve the health outcomes for individuals with multiple, chronic medical conditions, starting with its risk-based Medicare patient population. The ACC, as envisioned, is a one-stop shop for patients who need support managing their chronic diseases, offering primary medical care, behavioral health services, nutrition counseling, and fitness assessment and training in one location.

Role	Scope of services	Estimated Staffing Requirements (for 800 patient center)
ACC Physician	<ul style="list-style-type: none"><li>Clinical leader for the patient's care</li></ul>	2 ACC Physicians
Advanced Practice Nurse	<ul style="list-style-type: none"><li>Supports ACC Physician by evaluating and caring for patients as appropriate</li></ul>	2 Advanced Practice Nurses
Health Advocate	<ul style="list-style-type: none"><li>Primary patient contact and care coordinator, drawn from the local community</li></ul>	4 Health Advocates
Nurse	<ul style="list-style-type: none"><li>In-office patient care</li></ul>	1 Nurse
Behavioral Health LCPC	<ul style="list-style-type: none"><li>Provides BH consultations (with BH Hub tele support)</li></ul>	1 LCPC
Pharmacist	<ul style="list-style-type: none"><li>Assists in pharmacy and medication therapy management</li></ul>	1 Pharmacist
Social Worker	<ul style="list-style-type: none"><li>Coordinates solutions to resolve home, family life, and financial issues</li></ul>	1 Social Worker

<b>Dietitian</b>	<ul style="list-style-type: none"> <li>Helps patients develop and maintain diets appropriate for their conditions</li> </ul>	1 Dietitian
<b>Chaplain</b>	<ul style="list-style-type: none"> <li>Provides spiritual care and support to patients</li> </ul>	1 Chaplain
<b>Trainer/Exercise Physiologist</b>	<ul style="list-style-type: none"> <li>Provides strength and balance training to patients; experience working with geriatric population</li> </ul>	1 Trainer/Exercise Physiologist

The AdvocateCare® Center—the Advocate Medical Group site applying to participate in the medication optimization shared learning and action network—opened on June 27<sup>th</sup>, 2016 in the Beverly neighborhood on Chicago’s south side. The site serves patients from nearby Advocate Medical Group sites and two Advocate hospitals, Advocate Christ Medical Center and Advocate Trinity Hospital. These locations serve an underserved, under-insured community.

Advocate Trinity Hospital located in Chicago, Illinois serves an area with a total population of 578,551. The population is 83% African American, 10% Caucasian, and 9% Hispanic or Latino ethnicity. In Trinity Hospital’s primary service area, the percent of families living below the Federal Poverty Level (FPL) is 22.85%, which is higher than both state (10.79%) and county (13.83%) percentages. The percent of families living below the FPL in Trinity Hospital’s secondary service area is 31.84%, nearly three times the Illinois percentage.

Christ Medical Center, located in Oak Lawn, Illinois, serves an area with a total population of 1,560,571 living in 55 communities in Chicago and south and southwestern suburbs. The population is 38.4% Caucasian, 35.6% Black Non-Hispanic, 23.2% Hispanic, 1.6% Asian and Pacific Islander Non-Hispanic and 1.1% other. There was a significantly higher unemployment rate in the hospital’s service area compared to the U.S. rate. Household income was also less than the U.S. average.

The AdvocateCare® Center providers have observed that the demographics of their patients align with the underserved communities reached by the two nearby hospitals: An estimated 85% of the patients seen at the ACC are African American and the remaining 15% are Hispanic or Caucasian. The ACC serves a Medicare population and most patients are in their early 70s or older. Many of the patients face significant socio-economic barriers to care and have low levels of health literacy.

- What does your organization hope to accomplish as a participant in this learning and action network?

Characteristics of ACC patients include frequent hospitalizations for chronic diseases, co-morbidities such as depression, substance abuse, and poly-pharmacy. ACC patients face many barriers to care including lack of access to transportation, low health literacy, unstable housing or food insecurity—all of which can affect a patient’s ability to follow his or her medication treatment plan. The AdvocateCare® Center (ACC) team is eager to develop best practices

surrounding medication optimization, building a comprehensive social needs assessment, and navigating social service referrals.

Access to medication and low health literacy are recognized challenges for ACC patients. Therefore, providers use “teach-back” and “show-me” methods to ascertain how successful they have been in explaining medication choices and treatment plans to patients. Providers verify that the patient has the right prescription and proper dosage, then work to ensure the patient is on the fewest amount of medications to achieve patient-centered goals of care. The ACC has a clinical pharmacist on staff who assists in medication therapy management, but all clinical providers are involved in patient education and monitoring. The ACC team looks forward to learning new strategies and developing resources to improve this process.

The ACC team plans to evaluate the existing Social Determinants of Health (SDOH) screening tools and select one to help identify socio-economic factors affecting patient outcomes. By identifying health-related social needs early and addressing them systematically, the team expects to see better adherence, improved self-care and appropriate use of medications by patients. The ACC team would like to learn from others in the network which SDOH tools are most effective and best suited to serve their populations.

ACC participants would like to understand how other primary care practices navigate complex referral networks and local social service agencies. The physician and social worker have experienced difficulties working with community-based agencies. These agencies operate with few resources and work in silos which makes it difficult to find services and coordinate care for patients.

- Does your organization plan to focus on a sub-population, such as patients with complex needs, co-morbidities, or multiple medications? (Note that we are particularly interested in applications that focus on these populations.)

The AdvocateCare® Center operates based on a model that focuses on patient-centric chronic condition management solutions for an elderly poly-chronic population. Patients treated at the ACC typically have diagnoses of diabetes, chronic kidney disease (CKD), chronic obstructive pulmonary disease (COPD), congestive heart failure (CHF), and coronary artery disease (CAD). In addition to their chronic primary disease, patients frequently have comorbidities such as arrhythmias, asthma, dementia, obesity, stroke, substance abuse, and behavioral health issues.

- The name of the medical or administrative leader who this team will be able to rely on to remove whatever obstacles may arise or to obtain necessary resources during the learning and action network?

Richard H. Bone, MD, is the Senior Medical Director of Population Health for Advocate Medical Group and will serve as the medical leader responsible for removing any obstacles or securing resources necessary for the team’s participation in the Learning and Action Network. Dr. Bone,

is a Board-Certified Gastroenterologist who was the main leader and instrumental in the establishment of the Advocate Care Center. He has spent his entire Clinical and Administrative Career working in the underprivileged neighborhoods of the South Side of Chicago and has a passion for leading programs that will improve the lives of patients in the local neighborhoods. His previous position was Vice President of Medical Management for Advocate Medical Group for more than a decade while maintaining a Clinical GI Practice at both Advocate Trinity and Advocate Christ hospitals.

- Please list the names and titles of the three people most likely to participate in the learning and action network.

The AdvocateCare® Center is staffed by professionals who are passionate about their work and positioned to leverage their participation in the Network. Staff members who will participate include ACC Operations Manager, Matthew Berkley; ACC Lead Physician, Tiffany Groen, DO, MPH; and ACC Social Worker, Renee Kroplewski.

Matthew Berkley, MBA, MPH, serves as the ACC's Operations Manager. His responsibilities include processes and procedures that affect both patients and staff.

Renee Kroplewski, MSW, serves as the Social Worker for the ACC. Renee has an array of responsibilities in this role and coordinates all patient and family services. Renee provides assessments to understand patients' needs and connects patients to local social services. She provides resources and education to the patient and their families.

Tiffany Groen, DO, MPH, serves as the Lead Physician of the AdvocateCare® Center. Dr. Groen, along with Renee, has been at the ACC since it opened in 2016. As Lead Physician, Dr. Groen works with patients and other primary care physicians to ensure continuity of care throughout the patient experience. Dr. Groen works with the interdisciplinary team to identify and alleviate barriers to care.

- Describe the QI experience of the team members. In a brief paragraph, describe a recent improvement project undertaken by the team member(s), including the project design, measurement strategy, and any results.

Members of the team have experience working in a data-driven environment and using collected data to make quality improvements. The AdvocateCare® Center is a Quality Improvement initiative for the Advocate Aurora Health system. Early on, the ACC team created a dashboard to track and measure the ACC's impact on its target population, specifically analyzing overall care outcomes and acute utilization rates. See figure below for results.

Measure	6 Months Before Admission to Program	6 Months After Admission to Program	% Change
No Of Hospital Admissions	88	50	43.18%
No Of Hospital Days	432	300	30.56%
Hospital Admits / 1000	1,285	730	43.18%
Hospital Days / 1000	6,307	4,380	30.56%
No Of ER Visits	205	115	43.90%
ER Visits / 1000	2,993	1,679	43.90%
Readmits within 30 Days	16	10	37.50%
OBSERVATIONS / 1000	380	292	23.08%

This dashboard outlines a portion of the overall population at the AdvocateCare® Center who have been enrolled for at least 6 months. This is a pre-and-post assessment of the care and utilization outcomes.

These favorable results were accomplished by building an interdisciplinary team to coordinate care, and partnering with patients and their families to remove barriers, thus creating an environment of accessibility and trust.