Improving Quality and Lowering Cost Through Community Care Teams

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EXECUTIVE SUMMARY

The U.S. healthcare industry has seen an increased focus in delivering value-based care. In order to accomplish this, healthcare providers have turned their attention toward high-risk patients who are in frequent contact with the healthcare system. Specific attention has been tailored towards Medicaid patients who make up a majority of the high-risk population. Providers are implementing new approaches and strategies in order to improve the quality of health care and lower the cost for high-risk Medicaid patients. This essay highlights how the implementation of Community Care Teams (CCT) can effectively improve quality and lower costs for high-risk Medicaid patients. Through discussion of the success from Community Care North Carolina (CCNC), other states can understand the impact CCTs have on high-risk Medicaid patients. Delivering value-based care is made possible through CCTs by improving quality and lowering cost for frequent utilizers of the healthcare system.
INTRODUCTION

The movement in the U.S. health industry from fee-for-service (FFS) to value-based care has created an incentive for providers to focus more on improving quality while suppressing cost (Blumenthal, Chernof, Fulmer, Lumpkin & Selber, 2016). Value in health care can be defined as “a ratio of benefits accrued and the dollars spent to achieve those benefits” (Bozic 2013). Also known as “pay-for-performance”, value-based care models focus on “improving the quality, efficiency, and overall value of health care” (James, 2012). To succeed in a value-based care model, healthcare providers must improve the quality of care for those who utilize it the most (Blumenthal et al., 2016).

The value based care, or pay for performance, approach is not limited to Medicare and commercial payers. States are devoting more attention to populations that are in frequent contact with the healthcare system and make up the largest proportion of health care spending. As a result, providers are experimenting with new strategies that target Medicaid enrollees, who tend to be viewed as higher-risk patients (James, 2012). Through the incorporation of multi-stakeholder collaboration, states are improving quality and lowering costs for high-risk Medicaid patients (Hayes, Salzberg, McCarthy, Radley, Abrams, Shah, & Anderson, 2016).

The US. healthcare system has seen an exponential growth in the number of high-risk patients. It is critical that healthcare providers address their attention towards patients who are in successive contact with the system and thus more impacted by correctable health care quality (Blumenthal et al., 2016). In the U.S. an estimated 12 million people fall under this category. According to Hayes (2016), high-risk patients earn less than half
the income of the adult population, and average four times more in health care spending compared to the rest of the U.S. population (Hayes et al., 2016). On average, high-risk patients visit the emergency department “nearly three times the average for adults with multiple chronic diseases only, and more than four times the average for all U.S adults” (p.2). They are also three times more likely to be hospitalized. The majority of the high-risk patient population is composed of the elderly, females, less educated, low incomes, and disabled (Hayes et al., 2016). For the purpose of this paper we will specifically look at the estimated 9 million Medicaid patients who fall under this high-risk category (Peterson Center on Healthcare 2017).

Achieving higher quality and more affordable health care for these patients requires new organizational strategies and approaches. Medicaid programs across the country have developed value-based care approaches that aim to improve quality and slow cost growth. Programs are successfully achieving this through the implementation of Community Care Teams (CCT)—often referred to as networks, hubs, or health teams. Utilizing multi-disciplinary care coordination with a patient-centered focus, CCTs are designed to help manage the complex care of high-risk Medicaid patients. CCTs are aiding in meeting the growing needs of this patient population (Peterson Center on Healthcare, 2017). Through discussing how Community Care Teams function and specifically how the state of North Carolina implemented its care team, this essay highlights how CCTs can improve quality while lowering cost for high-risk Medicaid patients. The following sections of this essay will provide background on CCTs,
including their governance and financial structure, and discuss Community Care of North Carolina and its success.

**Community Care Teams**

Community Care Teams are provincially based care coordination teams designed to control patients’ complex illnesses across systems of care, settings, and providers. The overarching objective of CCTs is to aid primary care providers in supplying cost-effective and quality driven care. To achieve these objectives, CCTs require strong coordination between community services and care providers with increased focus on face-to-face patient centered contact. A strong coordination across an array of community services and clinical providers helps to improve quality and cost for high-risk Medicaid enrollees by minimizing duplications of services. Often CCTs are referred to as “high-utilizer programs” because they reduce in-hospital stays, emergency room visits, and overall cost for the patients who utilize healthcare providers the most (Bodenheimer, 2016). Generally speaking, CCTs are connected with Patient-Centered Medical Homes (PCMH) to provide collaborative care, coordinate supporting community resources, and assist in analyzing patient needs. (Center for Health Care Strategies & State Health Access Data Assistance Center, 2016) The PCMH is a “care delivery model whereby patient treatment is coordinated through their primary care physician to ensure they receive the necessary care when and where they need it, in a manner they can understand” (American College of Physicians, n.d.).

CCTs can vary significantly and are designed on the contingency of population needs, available community resources, and requirements set forth by individual states (Center
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for Health Care Strategies & State Health Access Data Assistance Center, 2016). In general, all CCT programs include a stakeholder engagement strategy, clarified financing and payment models, stated expectations for community health teams, and a defined evaluation strategy (Takach & Buxbaum, 2013). Although varying significantly, similar core features are evident in all CCTs. Throughout every design, CCTs incorporate:

- A collaborative team from different disciplinary backgrounds who work together to coordinate services, help manage medications, and promote self-management
- Care team members who routinely connect patients with community based resources
- Create and maintain sustainable relationships with patients through in-person contact
- Focus on transitions in care
- Collaborative sharing of patient information across providers and teams
- Holistic approach to care focused on the “whole-person”
- Increase reimbursements for primary care practices that coordinate with teams

Each core feature plays a crucial role in lowering cost while delivering quality care to high-risk patients (Takach & Buxbaum, 2017). In order to accomplish this, CCTs are strategically structured and financed.

**Governance Structure and Financing**

States can utilize an array of governance structures to supervise the design, implementation, and administration of CCTs. Many key elements of governance models include, but are not limited to: legislative authority, operational oversight, scaling and
replication, and stakeholder engagement. For a CCT to be effective, stakeholder engagement is critical (Center for Health Care Strategies & State Health Access Data Assistance Center, 2016). A hallmark of CCTs is their engagement with primary care physicians throughout the individual network. Every patient enrolled into a care team is connected to a physician that is responsible for providing care to that patient. Many other stakeholders play a role in the functioning of CCTs including, hospitals, home health agencies, public health offices, nonprofit organizations, and social service agencies. States that implement CCTs can receive input from their stakeholders through team development, ongoing collaboration, and operational oversight (Takah & Buxbaum, 2017).

When it comes to financing CCTs, models are strategically structured to be financially sustainable over time. For most Community Care Teams the prominent method of financing is through per-member-per month fees (Center for Health Care Strategies & State Health Access Data Assistance Center, 2016). Many states utilize financing strategies for CCTs that engage Medicaid, FFS, Managed-Care plans, Medicare, commercial and multi-payers (Center for Health Care Strategies & State Health Access Data Assistance Center, 2016). Most CCTs can benefit greatly from utilizing a multi-payer system because it allows for a greater range of team services and helps spread fixed cost occurred from creating and operating CCTs. (Center for Health Care Strategies & State Health Access Data Assistance Center, 2016). Also, the Affordable Care Act encourages states to implement CCTs by providing start-up
financing for Medicaid programs to develop teams for high-risk Medicaid patients (Takah & Buxbaum, 2013).

Overall the functions and operations of CCTs focus on coordinating services across an array of providers, establishing processes to identify high-risk patients, providing quality patient care, utilizing electronic data tracking to identify possibly gaps in care, and educating practices in ways to make quality improvements (Takach and Buxbaum, 2017). The rest of this essay provides more information on CCT’s by specifically looking at North Carolina’s implementation of their CCT model: Community Care of North Carolina to better illustrate how creating Community Care Teams can serve to improve quality and lower costs for high-risk Medicaid patients.

**Community Care of North Carolina**

Community Care of North Carolina (CCNC) is a public-private partnership that was created in 1997 in response to concerns that the federal government was going to require states to be accountable for Medicaid funding. The state of North Carolina responded by creating the “next-generational Medicaid program”: CCNC (Center for Health Care Strategies & State Health Access Data Assistance Center, 2016, p.5). CCNC has currently developed from a “pilot project” into a state-wide program through “14 nonprofit Community Care Teams” that expand over different regions including 27 counties (McCarthy & Muller, 2009, p.2). Through creating a partnership between Medicaid, primary care practices, and other local healthcare providers, CCNC assists in delivering quality cost-effective care to high-risk Medicaid enrollees across North Carolina. CCNC has developed into a unique and successful care team model by
connecting patients to a primary care practice, educating those practices on ways to improve quality, measuring the success of data outcomes, case managing high-risk patients, and creating a statewide structure that allows control at each individual network (Steiner, Denham, Ashkin, Newton, Wroth, & Dobson, 2008).

Through a local and state partnership, CCNC is designed to “leverage local resources and relationships to meet local needs and promote local responsibility for system wide principles of collaboration, population health management, and accountability” (McCarthy & Muller, 2009, p.2). Strong collaboration between the state and the 14 local Community Care Teams make it feasible for the program to support the health care needs of approximately eighty percent of North Carolina’s Medicaid population, which is an estimated ten percent of the state’s population (Steiner et al., 2008). To assist the patient population, the CCNC is currently home to over 1,3000 primary care practices with an estimated 3,500-4,000 physicians statewide; “representing one half of North Carolina’s primary care practices.” (McCarthy & Muller, 2009, p.2). Each primary care practice within the network is committed to meeting set requirements including, providing acute, chronic, and preventive care, adhering to evidence based regulations, educating patients, providing 24/7 on call service, and releasing clinical data and outcomes to assist in quality improvements (Artiga, 2009). Overall, the CCNC was designed by primary care physicians as a “grassroots response” to meet the needs of high-risk Medicaid patients by providing quality and cost-effective health care. (Steiner et al., 2008, p.362). The remainder of this essay provides information on the structure, quality outcomes, and financing that contribute to the success of CCNC.
**Structure**

North Carolina Medicaid enrollees obtain services through their local nonprofit care team which includes an array of health providers such as primary care physicians, hospitals, social services agencies, health specialist, and county and public health departments. Each local team is held accountable for meeting the health care needs of their enrollees (Artiga, 2009). CCNC utilizes an operational oversight approach to help supervise each care team (Center for Health Care Strategies & State Health Access Data Assistance Center, 2016). This approach requires each team to have a local steering committee that helps utilize data and expertise to guide and educate the team in making important decisions (Center for Health Care Strategies & State Health Access Data Assistance Center, 2016). By implementing steering committees over every team, CCNC creates a local control that cultivates ownership and creativity that allows every individual team to prioritize the decisions and programs to implement that best meet their enrollees’ needs (Steiner et al., 2008). Included in every local team is a physician who serves as a clinical director to help collaborate and coordinate with the “statewide board of directors” on direct initiatives for the state (Artiga, 2009, p.3).

According to McCarthy & Muller (2006), one of the most important aspects of CCNC’s structure and a large contribution to its success is its implementation of care team managers at the local level. Care team managers are hired to collaborate and build a personal relationship with primary care physicians within the network to better facilitate communication about patient’s health care needs. All patients are allocated to a care manager despite their state of need (McCarthy & Muller, 2009). The case load of every
manager depends on the teams’ composition, size, and the need of the patient population he or she is serving. Overall, care managers aid in creating a personal care plan for each patient, coordinating care across different health delivery settings, and assessing each patient’s process towards improvement to make adjustments if necessary (Bodenheimer, 2013). Care managers are critical members of every team and assist CCNC in recognizing high-risk Medicaid patients in need of care (Artiga, 2009). CCNC’s structure of local teams has proven to be very successful, yet it is the statewide structure that has truly improved quality outcomes for the program by fostering shared learning across teams (Steiner et al., 2008).

**Quality Outcomes**

The statewide infrastructure “provides support services, such as analysis of claims data, development of protocols, and recruitment of statewide expertise” that improve quality outcomes through health information technology (HIT) (Steiner et al., 2008, p. 364). North Carolina has invested in a central Informatics Center that merges clinical data and records physician-patient interactions (Takah & Buxbaum, 2017). According to the Center for Health Care Strategies & State Health Access Data Assistance Center’s research, the Informatics Center utilizes claim files that are updated weekly and enrollment files that are apprised monthly. It also strengthens Medicaid claims data with supplementary data sources, including hospital discharge data and lab results. Furthermore, the Informatics Center includes patients’ medical records and health information provided by the patient’s physician and care team members, which aids in stronger care coordination and connection across providers. The Informatics Center
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directly assists community care managers through tools that aid in delivering patient-centered care.

Another tool utilized by CCNC is the Care Management Information System (CMIS). CMIS is a “secure web-based system” that includes health assessments, patient records, screening tools, and provides a secure means for care managers to message across teams (Center for Health Care Strategies & State Health Access Data Assistance Center, 2016, p.11). Through CMIS, care managers can make better changes to meet practice needs. Care managers also have access to a Provider Portal that includes all patient information, allowing them to better prioritize the patients who are in need of care the most. The portal aids in improving communication across all team settings and statewide. (Center for Health Care Strategies & State Health Access Data Assistance Center, 2016). By implementing different means of HIT, CCNC makes it feasible for every care team to closely follow the services given to each patient enrolled in the program, thus, making it easier to see were improvements can be made in order to improve quality outcomes and lower cost (Takah & Buxbaum, 2017).

Finance

Community Care of North Carolina has not only structured their CCT program in a way that improves quality outcomes and lowers cost, but so that it is also financially sustainable. CCNC is largely funded by the state Medicaid office. In addition to technical support, resources, and information, the state supplies infrastructure funds (Center for Health Care Strategies & State Health Access Data Assistance Center, 2016). The state pays the local care teams $3 per-member per month (PMPM) to offset the cost of salaries
for team members and management activities (McCarthy & Muller, 2009). Many local

care teams amplify the state’s funding with additional grant support from national and

local organizations (Steiner et al., 2008). These additional grants are often aimed toward

achieving regional level goals specific to that patient population (Center for Health Care

Strategies & State Health Access Data Assistance Center, 2016).

Physician practices within care teams are paid on a fee-for-service basis in

addition to a $2.50 PMPM for local management activities. This additional payment is

used to motivate providers to “play a more active role in managing the health needs of

their patient population” (McCarthy & Muller, 2009, p.4). Physicians may also receive

more PMPM depending on the condition of beneficiary (e.g., $5 PMPM for disabled or
elderly) (Artiga, 2009). The financial structure of CCNC makes it possible for care teams

to successfully provide quality and cost-effective care for high-risk Medicaid enrollees.

Without a supportive and sustainable financial structure, CCNC would not be as

successful as it is today.

Success

Structured to offset rising Medicaid cost, Community Care of North Carolina has

achieved just that. CCNC has proven that the Community Care Teams can aid in

providing cost-effective quality care and lowering cost for high-risk Medicaid patients.

Since 1997, CCNC has served the high-risk population effectively while also saving

money. The Mercer group, a management consultant group, researched the impact of

CCNC and found that the program annually saves the state of North Carolina $160

million dollars (Steiner et al., 2008). With the help of CCTs, CCNC has proven to
improve care for Medicaid patients by results of lower ER visits and hospital admission percentages (Artiga, 2009). According to a study by Bodenhiemer (2013), high-risk patients enrolled in the program were compared to high-risk patients not enrolled in a care team. Results showed that CCNC enrollees had lower emergency room visits, hospital admissions, and cost juxtaposed to non-CCNC high risk-patients. In 2010, hospital admission rates for high-risk patients enrolled in a care team were 37% less than the patients that were not. Also, ED visits for high-risk patients enrolled in a care team were 22% less than patients not enrolled. Overall, CCNC patients had a lower “total risk adjusted cost of 15%” compared to high-risk patients not enrolled in a care team (Bodenhiemer, 2013, p.7). These improvements and cost savings have continued every year since.

Specifically, CCNC has seen improvements in the quality of care for asthma and diabetes patients. Improving care for patients affected by asthma was one of CCNC’s first objectives for bettering quality outcomes and illustrates the effectiveness of CCTs (Steiner et al., 2008). North Carolina saw a 79.4 million dollars savings in expenditures related to asthma care compared to the estimated 82.7 million in cost without the program (Artiga, 2009). Since implementation of the program, quality outcomes data illustrates that there has been a “21% increase in asthma staging and a 112% increase in the number of patients who received influenza inoculations” (Steiner et al., 2008, p.365).

To better see how CCTs can improve quality and cost outcomes for high-risk patients, the following section of this paper describes a personal testimony from a high-
risk Medicaid patient suffering from asthma. CCNC has made a lasting impact on her life.

**Niki’s Story.** Niki’s story, as told by Pully & Seligson (2017), paints the perfect illustration of what CCT’s can accomplish in the life of high-risk Medicaid patients. “A 12-year old child living in poverty,” Nikki suffered tremendously from her severe asthma condition before enrolling in CCNC (p.19). Prior to her enrollment, the cost to Medicaid for Niki’s care treatment for her asthma was $12,000. Although she visited the ER a total of 9 times and urgent care clinics approximately 6 times within a two-year period, her asthma condition was still winning the battle over her health. Once Niki started receiving treatment from a care team, her health greatly improved. The CCNC took a holistic approach to improve the quality of her care. Not only did her health care providers in her care team treat her symptoms, but they also considered factors such as her risk of childhood obesity, school attendance, and her environment. Through CCNC, her health care providers had complete access and in-depth data on her medical history and complications, thus helping them better treat her condition. By utilizing a holistic approach to Niki’s care, the CCNC saved the Medicaid program unnecessary cost.

After being enrolled into a Community Care Team, Niki and her family were educated about her condition and medications, which helped prevent further complications. Niki’s case manager also collaborated with environmental services to analyze aspects in her environment that possibly was provoking her asthma attacks. By the help of a care team, Niki’s family gained valuable resources that helped avert further complications and saved them money. Niki’s result after two years of being enrolled in
CCNC highlights how impactful care teams can be for high-risk Medicaid patients. Over the next 2 years of care through the program, the cost of Niki’s care was reduced to $2,000, accounting for “one-sixth of the amount that was spent” in the two years prior to her enrollment in the program (p.20). Also, Niki only went to the ER once and visited an urgent care facility only three times while being treated by her care team. For CCNC, Niki’s testimony is just “1 in more than a million success stories” of patients whose quality improved while saving money (p.20). Her testimony illuminates the advantages Community Care Teams provide to high-risk Medicaid patients (Pully & Seligson, 2017).

CONCLUSION

CCNC has demonstrated the ability of Community Care Teams to improve quality and lower cost for high-risk Medicaid patients. Through a strong structure, sustainable financing, and collaboration among an array of health care providers, Community Care Teams are improving care for Medicaid patients. Implementing Care Teams is a valuable strategy that enables healthcare providers to thrive under a value-based care model. Through inclusion of an array of healthcare service providers, providing case management services, and implementing quality improvement techniques, Community Care Teams are improving quality and lowering cost for patients who are high utilizers of health care services. CCNC serves as a great example of a successful Community Care Team that all states can learn and benefit from.
REFERENCES


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