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Integration of Palliative Care into The PCMH Model

Project 3gi

MARCH 17, 2021
CARE COMPASS NETWORK
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Introduction

Care Compass Network is a Performing Provider System formed for the purpose of administering the Delivery System Reform Incentive Payment (DSRIP) program in a nine-county area of New York, including Broome, Chemung, Chenango, Cortland, Delaware, Schuylers, Steuben, Tioga, and Tompkins. CCN is a 501(c)(6) organization with five area health systems as corporate members. In addition, CCN has approximately 175 total partners, which include providers of medical care, mental health care, substance use disorder services, as well as a wide range of community-based organizations, whose services support underserved populations in the areas of food/nutrition, transportation, substance use, mental health, material support, health literacy, care navigation and coordination, housing, parenting and young children, etc. Through the course of the DSRIP program, CCN implemented twelve different projects with the objective of transforming the health care system into a value-driven network capable of providing high quality care and services to Medicaid members. System transformation, from the perspective of CCN and its partners, encompasses a wide range of changes, including the following:

- Greater collaboration and coordination between clinical and social care service providers
- Shift of services from inpatient and institutional settings to community and home
- A focus on addressing determinants of health, both social and clinical in nature
- Integration of services across domains, including mental/behavioral, physical, and social
- Promotion of self-management skills for both physical and mental needs
- Partner readiness for value-based contracts and development of key competencies

Now, at the conclusion of the DSRIP program, CCN is in a position to consider the lasting impacts that eleven DSRIP projects have had on Medicaid members, community members, and the health care eco-system at large. CCN's Population Health department, with input from many sources, has produced eleven project evaluation reports and score cards in order to best compare across projects, despite the differences in project objectives and reach. The findings of these report will inform CCN's next phase, including the use of CCN funding after September 2020, when the final phase of CCN partner contracts concludes.

Each project report reflects the findings from a mixed-methods evaluation. Qualitative information gathered from CCN staff, partners, Medicaid members, and community members contribute to the findings. In addition, the reports consider quantitative findings. Included in the report are findings on the scale and reach that CCN was able to achieve – the number of organizations engaged in the project and the number of Medicaid members engaged. CCN also considered the statistical relationship between project activities or services delivered to patient/clients and key patient outcomes from the DSRIP program including preventable emergency department visits, inpatient hospitalizations, and primary care engagement. Further, CCN considered the impact of the projects on several different quality indicators associated with project-specific DSRIP performance measures. All results are explained in detail throughout.

Data Sources

Information supporting this project evaluation comes from four primary sources. Each source of information contributes to the project scorecards, which allows for comparison across disparate projects.

To gather input from organizations intimately knowledgeable about the projects and their impact, we partnered with Research & Marketing Strategies to conduct structured in-depth interviews with partners who participated in the projects. In total, 21 in-depth interviews were completed. CCN Project Managers identified candidates from partner agencies for interviews based on their involvement in project implementation and their role in the project. Candidates were invited to participate and their organizations

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were reimbursed a nominal payment to reflect the level of effort involved. Key themes assessed include patient outcomes, cost of care, lasting partnerships with other organizations, workforce development, and system transformation. Many interview questions were open-ended and allowed the respondent to comment freely, positively or negatively, about the effectiveness of the project. The questionnaire also used scale-based questions, which can easily be compared across respondents and projects.

CCN also gathered input on the same themes from partners at large through open dialogue at the four May 2020 Regional Performing Unit meetings (all held remotely via video conference call). In addition, a follow up survey using SurveyMonkey collected broader partner feedback on workforce development and system transformation using scale-based questions.

To gather information from Medicaid and community members, CCN leveraged the on-going, periodic electronic survey administered by RMS of a panel of Medicaid Members (self-identified) and community members. A brief survey tool was developed to gather high-level input on the activities that CCN and the DSRIP program at large promoted. Overall, the response rate was 14% (consistent with industry standards); 46 Medicaid members and 72 community members responded.

To gather input on the total CCN achievements for each project, we incorporated material from structured reports written by CCN Project Managers who are responsible for managing the project implementation, maintenance, milestone reporting to NY Department of Health, and payment to partners. Project Managers summarized project progress, noting major accomplishments, barriers, and options for sustainability.

Finally, to understand the impact of each project from a statistical perspective, CCN conducted a quantitative analysis to establish, at a person level, the link between project activities and patient outcomes, such as primary care engagement, emergency department visits, and inpatient discharges. Additionally, CCN considered project specific quality indicators and their link to the project activities. In each case, a cross-sectional analysis using data from July 2016 to June 2019 and the population of Medicaid members who were DSRIP attributed to CCN during Measurement Year 5 (July 2018 to June 2019). The data sources for these analyses included CCN project data, submitted to CCN by partners contracted for each project, and Medicaid Confidential Data pulled from the Salient Interactive Miner, a proprietary data mining tool made available to Performing Provider Systems like CCN for use under the DSRIP program.

Project Summary

According to the Center to Advance Palliative Care (CAPC), at least 12 million adults are living with serious illness. The overwhelming majority of patients with serious illness, however, are neither dying nor hospitalized – they receive care over months or years. In fact, people living with serious illness make up the 5% of the patients driving over 50% of all healthcare spending. Of this 5%, only 11% are in their last year of life, and a full 40% of these patients will face persistent high utilization over a number of years. In essence, this small percentage of patients become “disproportionate users of 911 calls, recurring ED visits, hospital admissions and skilled nursing facility admissions,” services which equate to “crisis care,” and create high spending with little value. Palliative care can have a significant impact in this area and is directly aligned with Value-based Payment (VBP).¹ Per CAPC, “Palliative care is specialized medical care for people with serious illnesses. It is focused on providing patients with relief from symptoms, pain, and stress of a serious illness—whatever the diagnosis. The goal is to improve quality of life for both the patient and the family.

¹ Center to Advance Palliative Care (2020) *The Case for Community-Based Palliative Care* [White Paper] CAPC. <https://www.capc.org/documents/867/>

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Palliative care is provided by a team of doctors, nurses, and other specialists who work together with a patient's other doctors to provide an extra layer of support. It is appropriate at any age and at any stage in a serious illness and can be provided along with curative treatment."² Hospice care is a subset of the palliative care continuum, focusing specifically on patients in the last six months of life; hospice services are not delivered concurrently with curative treatment.³ Palliative care, more generally, is based on patient and family needs, rather than prognosis. Palliative care teams respond to changing patient needs along the continuum of illness trajectory, addressing episodic, complex, and the long-term nature of serious illness. The impact of palliative care on patient outcomes has been studied as well. According to CAPC, recent studies have shown that palliative care can reduce symptoms and improve quality of life, reducing unnecessary emergency department use, hospitalizations, and time spent in intensive care units.⁴

The objective of the "Integrating Palliative Care in to the PCMH model" DSRIP project ("Palliative Care") was to increase access to the palliative care programs for person with serious illnesses and those at the end of life in order to ensure access to services and ensure that end-of-life planning needs are understood, addressed, and achieved prior to decisions to seek more aggressive care or enter hospice.⁵ The DSRIP project outlined a strategy for PPSs to include building partnerships between palliative care providers and primary care practices, integration of palliative care services and supports into the primary care practices, development of clinical guidelines to implement the Integrated Palliative Care Outcome Survey (IPOS) (an assessment of palliative care needs and referral to interventions)⁶, as well as systemwide approaches to promote palliative care (engagement with Medicaid managed care organizations for coverage and community oversight of the palliative care services).⁷

CCN engaged several area healthcare providers to form the 3gi Palliative Care Project Team. The team included executives and health care experts from local palliative care and hospice care agencies, hospital systems, and other organizations which provide health services to those with chronic illness. CCN maintained two project implementation models through the life of the program, including the DSRIP-defined Palliative Care into PCMH integration model and the Community-based Palliative Care Pilot Program. The two models are summarized.

a) Palliative Care into PCMH Integration Model

CCN worked with primary care and palliative care partners to support the integration of palliative care into the PCMH model, which emphasizes a patient centeredness and multidisciplinary care teams.⁸ Primary care partners adopted standardized palliative care guidelines and Electronic Health Record workflows to facilitate early identification of opportunities for palliative care (provided in house or through referral), referral procedures to link patients to outside palliative care agencies, implement the Integrated Palliative Care Outcome Scale (IPOS), and facilitate advanced care planning. CCN worked with partners to identify and manage a panel of patients who, depending on their clinical needs, may require palliative care in some

² <https://www.capc.org/about/palliative-care/> (Accessed December 2020)

³ Shalev, A., Phongtankuel, V., Kozlov, E., Shen, M. J., Adelman, R. D., & Reid, M. C. (2018). Awareness and Misperceptions of Hospice and Palliative Care: A Population-Based Survey Study. *The American journal of hospice & palliative care*, 35(3), 431–439. <https://doi.org/10.1177/1049909117715215>

⁴ America's Care of Serious Illness: A State-by-State Report Card on Access to Palliative Care in Our Nation's Hospitals. Center to Advance Palliative Care and the National Palliative Care Research Center. September 2019

⁵ DSRIP project toolkit (https://www.health.ny.gov/health_care/medicaid/redesign/docs/dsrp_project_toolkit.pdf)

⁶ For more information, see <https://pos-pal.org/>.

⁷ DSRIP project toolkit (https://www.health.ny.gov/health_care/medicaid/redesign/docs/dsrp_project_toolkit.pdf)

⁸ For more about PCMH, see <https://pcmh.ahrq.gov/page/defining-pcmh> (Accessed December 2020).

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form. Primary care partners were responsible for providing these patients with palliative care services, or, for referring them to palliative care partners in the community better suited to address the patient need.

Palliative Care agencies also provided direct services to patients, either through referral from primary care settings (or acute care settings, as is traditionally the case). The Palliative Care project supported these services, including telephonic assessment, home visits with RNs and/or LMSW for assessment, interventions, and care planning. Through development of care guidelines and program requirements, all points of care and interaction either with or on behalf of the patient will be documented in the electronic health record and communicated back to the referring physician, PCMH, and the patient's PCP.

Partners were asked to use the IPOS assessment to measure the 5-critical metrics linked by the Department of Health to palliative care programs. These metrics include asking about the patient's level of pain, level of other physical symptoms, the presence of depressive feelings, feelings of being at peace, and the presence of advance care directives. This objective of this assessment is to identify areas where the patient is experiencing discomfort that may require an intervention (indicated by a score of 2+ on a scale of 0-4), and to provide an intervention where necessary. In addition, the assessment identified gaps regarding advanced directives. Addressing the gaps had the intention of ensuring that patients who did not have any form of advance care directive were given an intervention and that a Health Care Proxy form was completed. These assessments were scanned into the EMR upon completion and submitted to CCN as part of the monthly reporting process.

CCN also support the development and expansion of palliative care provided in acute care settings for the purpose of strengthening the infrastructure of inpatient palliative care programs in settings other than primary care. Partners developed palliative care planning committees and met regularly, and implemented CAPC Palliative Care Education program for staff members. The palliative care medical models were further developed by creating palliative care workflows, primary care physician engagement strategies, and palliative care business planning. CCN supported these activities by providing access to palliative care clinical content and professional resources, as well as supporting the development of clinical workflows to better integrate palliative care.

b) Community-based Palliative Care Pilot Program

Most of the project's implementation success came in the later part of the DSRIP program. With guidance and input from the 3.g.i Project Team, CCN implemented the Community-based Palliative Care Pilot Program to overcome several system-wide challenges that have historically limited the role of palliative care in the health care system. These challenges include limited awareness of palliative care among patients and providers (a common phenomenon^{9,10}), which can result in palliative care referrals that are late in the disease trajectory, thereby limiting care options to hospice services¹¹. Related, there were very few existing partnerships between primary care providers and the community palliative care organizations in the CCN service area. Thus, starting out, CCN and the Project Team were tasked with expanding knowledge and awareness, building rapport and collaborative relationships, as well as facilitating

⁹ Tulsy J. A. (2015). Improving quality of care for serious illness: findings and recommendations of the Institute of Medicine report on dying in America. *JAMA internal medicine*, 175(5), 840–841. <https://doi.org/10.1001/jamainternmed.2014.8425>

¹⁰ Shalev, A., Phongtankuel, V., Kozlov, E., Shen, M. J., Adelman, R. D., & Reid, M. C. (2018). Awareness and Misperceptions of Hospice and Palliative Care: A Population-Based Survey Study. *The American journal of hospice & palliative care*, 35(3), 431–439. <https://doi.org/10.1177/1049909117715215>

¹¹ Tulsy J. A. (2015). Improving quality of care for serious illness: findings and recommendations of the Institute of Medicine report on dying in America. *JAMA internal medicine*, 175(5), 840–841. <https://doi.org/10.1001/jamainternmed.2014.8425>

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opportunities to expand and integrate the delivery of palliative care services into the practice of primary care. Although progress was made on this front through the Palliative Care into PCMH Integration Model, it was only through the community-based pilot program that CCN became successful in helping partners to build referral streams and collaborative care models among palliative care agencies and primary care practices.

The Community-based Palliative Care Pilot Program is an alternative to the DSRIP vision of integrated palliative care. As healthcare systems across New York State began to identify “high utilizers” of inpatient care, they recognized that a community-based palliative care service offered a viable, timely solution for many patients, who often manage their illnesses through hospital and emergency department utilization. The program is designed around DSRIP-grounded principles. First, the point of intervention (referral) occurs at the acute (inpatient) setting, where the high-utilizer is often receiving care. Second, the program recognized that community-based organizations may be best suited to build and support home-based palliative care services for chronically-ill patients. Finally, the program supports palliative care for patients regardless of payor. Through this payor-blind program, true referral momentum was built and long-term cultural change became possible.

Leveraging the principles set forth in the NY Department of Health 3.g.i DSRIP Project Toolkit, the Community-based Palliative Care Pilot Program prioritized six main objectives. First, align with the momentum being generated through the DOH Max Series by shifting the desired point of intervention to the acute setting, where special action teams were intentionally working to reduce unnecessary utilization. Through this shift, the pilot would be positioned to achieve maximum patient volume and therefore the negotiating power necessary to ultimately sustain palliative care programs through payor organizations. Second, reduce avoidable hospital admissions for patients enrolled in a pilot program by 20% over a period of 12-months. Third, provide timely, relevant linkages between patient needs and interventions – a result which would require closed-loop communication throughout the entire patient care team, including, perhaps most critically, the PCP. Fourth, facilitate the creation of a true interdisciplinary care team through the use of evidence-based assessment tools, such as the Integrated Palliative Care Outcome Scale (IPOS), to prioritize the patient’s unique symptoms and needs as the focal point for case conferencing and care coordination. (Further, it was assumed that the alignment of these tools would help to consistently improve upon the 5 IPOS-based DSRIP performance metrics. Fifth, focus on relationship building and education between health systems, hospitalists, primary care physicians and community-based organizations to promote a delivery system of palliative services across the continuum and to encourage identification of palliative needs earlier in the disease trajectory. Sixth, increase use of hospice through continued patient and provider education and promotion of early intervention along the disease trajectory. In summary, the intention of CCN’s Community-based Palliative Care Pilot Program was to improve the delivery of care for chronically ill patients by promoting an integrated, patient-centered system capable of reducing gaps in service, and transform futile and unsatisfying results into improved health outcomes.

Three CCN partners participated in the Community-based Palliative Care Pilot Program at various intervals from February 2018 to September 2020, including: Hospicare and Palliative Care Services of Tompkins County¹² (Ithaca, NY), Ascension Lourdes Hospital¹³ (Binghamton, NY), and CareFirst¹⁴ (Painted Post, NY).

¹² For more information about Hospicare and Palliative Care of Tompkins County, see <https://www.hospicare.org/>

¹³ For more information about Ascension Lourdes Hospital and hospice services, see:

<https://healthcare.ascension.org/Locations/New-York/NYBIN/Binghamton-Our-Lady-of-Lourdes-Memorial-Hospital> and <https://healthcare.ascension.org/Specialty-Care/Hospice-Care>

¹⁴ For more information about CareFirst and its palliative care services, see: <https://carefirstny.org/palliative-care/>

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CCN supported each participating organization in the creation and deployment of their own program to provide interdisciplinary, patient-centric palliative care. Partners were responsible for developing relationships with community partners (health systems, primary care practices, etc.) who would generate referrals to the program. Additionally, these partners were tasked with formalizing the design and execution of their community-based palliative care teams, workflows and service offerings; and for creating and maintaining consistent case conferencing, collaboration and documentation across the interdisciplinary care team.

While each participating partner emphasized an interdisciplinary care team as critical to program success, each community-based palliative care program was designed with the resources at hand and the unique needs of the patient geography/demographics. Key roles within the interdisciplinary care team included: Medical Directors, Palliative Care Physicians, Nurse Practitioners (NP), Registered Nurses (RN), Social Workers (SW), Case Managers, Nurse Navigators, and Chaplains. Within the interdisciplinary care team, team dynamics varied, and resources were allocated and sometimes reallocated to different roles, driven by patient need. Nurse Practitioners, for example, may have focused on refractory symptom management, physical assessment, reconciling medications and coordinating care with patients' PCP and specialists, while other team members, such as RNs, Case Managers or Social Workers helped to provide patient/caregiver education and navigation, hosted goals of care discussions, and developed care plans with patients and their families.

CCN supported each participating partner received start-up funding at contract initiation as well as a per member per month (PMPM) rate to manage a panel of 50-70 patients in return for providing reports to CCN on a monthly basis. Additionally, partners received a once-per-patient stipend to cover expenses related to new patient onboarding. Partners were expected to complete the IPOS and other information required for DSRIP reporting.

Hospicare and Palliative Care Services of Tompkins County ("Hospicare"). Using a coaching model focused on providing both education and support, Hospicare's Palliative Approach to Health (PATH) program adopted the community-based palliative care model with the primary objective of decreasing the burden of illness and increasing the quality of life for their chronically ill patients. The goal of PATH was to coach, empower, and provide information and expertise to patients and caregivers to optimize their health, quality of life, and to address the risks for Emergency Room use, hospital admission, and hospital readmission. PATH was made available to patients who had a life-limiting illness, a prognosis of less than 36 months, and who had a desire to proactively manage their illness outside of the hospital setting.

PATH patients were identified in the community using various methods, including hospital identification by a Palliative MD or Hospitalist (13-21%), Primary Physician Practice (37-60%), and internally from Hospicare patients who may have been referred to hospice but were better suited for palliative care services. To better support the referring professionals, the PATH Team asked that patient referrals be made directly to the PATH Advisor, who would assess the patient and determine eligibility. The PATH team was comprised of a part-time Medical Director, a part-time RN Advisor, a part-time Senior Clinical Administrator, a part-time RN Program Manager, and Social Workers and Spiritual Advisors that were employed on a consultative basis. Patients enrolled in the program had primary diagnoses of COPD or Lung Disorder (3-23%), Cancer (25-38%), Alzheimer's Disease or Brain Disorder (11-17%), Cardiac Disorders (19-21%), Kidney Disease (>2%), as well as others.

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Once enrolled, the PATH Advisor worked closely with the patient's primary care provider (PCP) to provide specialty-level assistance for difficult-to-treat pain and other symptoms, including nausea, shortness of breath, fatigue, constipation, and depression. With the intention of reducing avoidable ED visits and hospitalizations, rescue medications for at-home use were determined by the PATH team and PCP. Patients and caregivers were connected to local resources for social care services, such as meal/food delivery, safety devices, durable medical equipment, medical consultations, housing assistance, and transportation assistance. The PATH Advisor helped to coordinate care and provide support for patients and caregivers who were dealing with multiple doctors and a fragmented medical system, as well as those struggling with complex decisions.

Despite CCN program conclusion, Hospicare intends to continue the PATH Program and to redesign the program to a medical model in the future, which will include a Nurse Practitioner to provide initial visit and periodic palliative encounters, and an RN Case Manager to provide nursing and psychosocial assessments.

Ascension Lourdes Hospital. The Lourdes Community-based Palliative Care Program (CBPC) launched in January 2019 with the primary objective of extending their inpatient and outpatient palliative care services into the community/home-based setting. Using their CAPC-sponsored Palliative Care Learning Center (PCLC) training as a foundation for program design, the Ascension Lourdes team started with a detailed assessment of community needs and gathered best-practice recommendations for implementing community-based palliative care from accredited national palliative organizations. Ultimately, Lourdes selected a medical model of community-based palliative care for their pilot. The Ascension Lourdes CBPC team was comprised of a part-time Medical Director, two full-time NPs, one full-time RN Nurse Navigator, one full-time Social Worker, a part-time Medical Office Assistant (MOA), and a part-time Chaplain.

CBPC patients were identified primarily through referrals received through Ascension Lourdes Physicians (PCP or Hospitalists), self-referrals, families, or other health care organizations and agencies. The CBPC program accepted patients with a primary palliative diagnosis (Heart Failure, COPD, etc.), a documented need (for example: patient is homebound), and other criteria. This program served patients within a 25-mile radius of Ascension Lourdes, including Broome, Tioga and Chenango Counties. During an initial home visit, the CBPC RN conducted a comprehensive needs assessment across eight palliative care domains using an assessment tool that was created for this process. This needs assessment was embedded into the Lourdes EMR, as well as patient consents and screens (including the Patient Health Questionnaire-9 (PHQ-9) for depression, Generalized Anxiety Disorder 7 assessment (GAD-7), and Zarit Caregiver Burden Interview Short Form (ZBI-12) to assess caregiver burden). Patients were offered social work and spiritual care support as needed at this time. (Note: The initial RN home visit was sometimes done telephonically, such as during the COVID-19 pandemic). Once the RN home visit was complete, an NP made a second home visit to perform a comprehensive medical assessment, establish goals of care, implement initial interventions and continue developing the care plan started by the RN. Subsequent NP visits were made routinely with frequency determined by the individual patient's level of need. During enrollment, telephonic support was available for patients, caregivers and families on a 24-7 basis. Additionally, the CBPC RN Nurse Navigator coordinated care and facilitated referrals as needed, and the patient and caregivers were offered social work services based on the identification of emotional distress. Other services including caregiver support groups, navigation services for social care needs, and Ascension Lourdes-based services (e.g. aide service, Certified Home Health Agency) were also provided as needed.

Due to the qualitative and quantitative success of the DSRIP 3.g.i. pilot, Ascension Lourdes is committed to continued support and growth of this program.

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CareFirst. The Community-based Palliative Care (CPC) program at CareFirst, founded on the Quadruple Aim of Healthcare, was administered by trained palliative care clinicians from CareFirst under the coordination of the patient's PCP. CareFirst's Community-based Palliative Care (CPC) Program provided a combination of palliative care services designed to support patients, families and caregivers who were coping with serious illness to effectively manage their disease, including wide-ranging symptoms, from the home setting. The CPC team was comprised of a full-time Certified Hospice and Palliative Care Nurse (CHPN), a full-time Bachelor of Social Work (BSW), a part-time Director of Clinical Services, and a part-time LMSW with specialty in advanced palliative care, and Support Services Manager. The patient's individual physicians were also included as part of the extended care team through collaboration and coordination of services.

CPC patients were referred to CareFirst's Community-based Palliative Care program from a variety of sources, including: physicians, self-referrals, friends and family, and internally from CareFirst through other care programs. Referrals were taken by phone by CareFirst's Access Department staff, who then followed-up with the patient or physician to gather basic demographic and health information. Qualifying factors for admission to the CareFirst CPC Program included diagnosis of a chronic or medical disease at any stage; the presence of three (3) or more needs as indicated on the initial assessment; residency in Chemung, Schuyler or Steuben counties; and consent for CPC services provided by either the patient or the patient's legal representative. Patients enrolled in the program had top primary diagnoses of COPD (24%), Dementia (22%), Cancer (19%) and CHF (14%); most patients had multiple co-morbidities.

Once enrolled, all patient assessments and treatment planning occurred within the CareFirst EMR. Following the completion of the *Initial and Comprehensive Assessment*, which covered patient's and family's current physical, emotional, and spiritual needs the Patient Plan of Care was developed. This plan outlined specific goals, challenges and interventions related to each patient's individually identified needs and concerns. Team members collaborated daily through phone, text, email, as well as the EMR Notification System, which automatically notifies the care team members when an admission has occurred. The CareFirst CPC team met weekly for patient case reviews to facilitate collaboration, review patient needs, and to close the loop on any outstanding items. Ongoing Comprehensive Assessments were completed whenever a significant change in the patient (or the patient's family) status occurred throughout their admission. The progress of interventions and goal achievement was tracked through the Patient Plan of Care throughout the duration of the community-based palliative care pilot program.

Palliative Care Services Provided. Services provided to palliative care patients participating in the community-based pilot were selected by the partner at the point of program design, and often included the following:

- Consultation support for PCPs to help address both workforce and time constraints while improving the quality of patient care and satisfaction
- Home visits and phone calls (with frequency established by the patient and care team)
- Development of a patient care plan including action plans for symptom management (escalation protocol)
- 24/7 on-call service with RN, NP and/or MD access
- Medication review/reconciliation
- Palliative care needs assessment utilizing the Integrated Palliative Outcome Scale (IPOS), which rates the intensity of physical, emotional, social, and practical needs
- Symptom management monitored by the IPOS assessment or a similar tool with the goal of reducing physical, emotional and/or spiritual distress

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- Collaboration with the PCP including updates on findings, interventions, community referrals, and palliative care recommendations
- Routine interdisciplinary team care coordination, collaboration, and discussion of patient needs
- Connection of patients and caregivers to resources addressing identified SDOHs, including food, transportation, housing, and medical equipment needs.
- Goals of care discussions with patients and their caregivers utilizing advance care conversations and motivational interviewing.
- Education and assistance in the completion of advance care directives as needed, including but not limited to Health Care Proxies and Medical Orders for Life-Sustaining Treatments (MOLST/eMOLST).
- Facilitation of clear communication between patients and caregivers
- Patient and caregiver education regarding the disease process and symptom management
- Improved patient and family experiences in navigating the healthcare system, including care coordination for patients dealing with multiple doctors
- Assistance, guidance, and empowerment around making complex medical decisions

Evaluation Results: Project Impact Scorecard

This table summarizes the evaluation results. In order to readily compare across projects, a scoring matrix was created and reflects each study component. The detailed scorecard can be found in the appendix.

Of note, the quantitative analysis for this project is limited to services provided under the DSRIP PCMH project Model and excludes services under the Community Based Palliative Care Pilot program. Detailed patient data were not collected as part of the pilot program.

Table 1: Project Impact Scorecard		
Evaluation Elements	Possible Points	Points Received
View from the Front Line: Partners		
In Depth Interviews with Partners	25	24.29
RPU Meeting input and Survey	10	N/A
Member Voice: CCN’s Medicaid and Community Member Panels		
Panel Survey conducted by RMS	15	11
Community Accomplishments: CCN Project Managers		
Structured report by PMO, Follow up Interview	25	15.8
Performance Metric Impact: Population Health		
Project Impact on Performance Metric Results – PCMH Program Only	15	7.9
Causal Effect	6	0
Cost Effectiveness Analysis	4	0

Overall (On 90)	90	58.9
Overall (On 100) – Prorated for comparison to other projects	100	65.5

a) Best Practices

The Development of Palliative Care Teams

While the practice of Palliative Care still faces challenges in terms of achieving universal practice adoption in both the Primary Care and Hospital settings, the activities of this project have facilitated significant advances in the development of Palliative Care Teams. These interdisciplinary teams, often composed of Hospitalists, Primary Care Providers, Palliative Physicians, Social Workers, Chaplains, Nurses and Nurse Practitioners, have been able to evolve more formally over the last several years. Today, we see Palliative Care Teams collaborating to improve patient outcomes through high quality care; and building operational workflows which streamline all communication related to the services being provided. Further, Palliative Care is increasingly being recognized as a medical specialty, like Cardiology or Oncology, and a critical component of high-quality, low-cost patient care.

Central Support for Continuing Palliative Care Education

Basic project activities have provided a solid, formalized foundation for palliative care education. This education has primarily included learning administered by CAPC, for which CCN has subsidized a corporate membership. This membership, available to practitioners at an individual level, has allowed participating partners access to a virtually unlimited library of palliative care education, including tools and resources designed to help these teams build their own sustainable palliative programs. In addition to online learning, the CCN CAPC membership has provided select partners with an opportunity to participate in the Palliative Care Learning Center (PCLC) program, in which they have the opportunity to be linked with high functioning Palliative Care Teams across the nation in a 12-month mentorship program.

In addition to the partnership with CAPC, CCN has facilitated the implementation of e-MOLST for several partner organizations. These hospital-based partners have worked diligently to standardize education and messaging on palliative care procedures, messaging, and physician/patient education throughout the entirety of the inpatient and outpatient teams – all of which are required to effectively support the documenting of patient advance care directives and goals of care.

Patient/caregiver access to a 24/7 on-call service is essential. In order to effectively address symptom exacerbation that often results in avoidable ED utilization, it was determined that having a 24/7 service was necessary to successfully relieving patient and caregiver anxiety related to symptom exacerbation. As noted by participating partners, these episodes often arise outside of normal business hours, and ultimately prevent the patient from staying at home (example: a COPD patient who wakes up during the night and can’t breathe will go to the hospital unless there is a predetermined care plan and known resource to call).

Provider discretion in program design is key to reaching high-needs patients. By allowing partners to determine their panel (cohort) of patients based on their own unique geography and patient

demographics without narrowing these cohorts by payor-type, the CCN Community-based Palliative Care Program was able to reach patients with the greatest level of need – patients who often resided outside of the original “known” target population (i.e. several programs started by focusing on key diagnoses and later expanded criteria to capture patients who were identified outside of these criteria with significant palliative need).

The Palliative Care Team may require amendment to best meet patient needs or ensure financial viability. Each partner participating in the Community-based Palliative Care Pilot Program had to build their team incrementally and were unable to recognize who was missing until the program was operational (example: Lourdes added a dedicated NP specializing in palliative care and geriatrics after program implementation had commenced, and now credits this addition as a critical step in building their team. As such, Lourdes added a second NP later in the cycle who specialized in home care and cardiology, giving them the expertise to meet other essential patient needs).

More intentional preparation of data, data analytics and metric achievement is needed to more thoroughly understand and measure the success of this program from an overall Population Health perspective. Future considerations may include the use of an established control group (baseline) and enhanced data collection extending requiring a more sophisticated and metric focused collaboration between referral source and the community-based palliative care provider.

Contracting with payors for palliative care services is essential for sustainability. While progress has been made in allowing for reimbursement of billable services through specialized roles (such as NPs and MDs), palliative care services in themselves remain largely unfunded. As seen through CCN’s Community-based Palliative Care Pilot Program, services that are done in parallel with MD/NP consultation contribute heavily to the improved patient outcomes that have been realized. These services, often provided through RNs or SWs, largely address patient need related to SDOH, navigation, education and care coordination – all of which show evidence of impact to key value-based metrics (i.e., as evidenced in the workflow descriptions of participating partners, many of the activities undertaken are not championed by an MD or NP and therefore lack a funding source). To date this gap has been filled through CCN contracting, however, as of program conclusion on 9/30/2020, this funding stream no longer exists.

b) Key Quotes

Project Manager thoughts from the report and interview:

- The Community-based Palliative Care Pilot Programs have significantly improved the volume and integrity of continuous referral streams to palliative care programs from a primary care and family practice providers hospital teams, as well as and patient families and caregivers. The increased volume of referrals has provided deeper insight into of the impact of palliative care on a wide range of chronic diseases including COPD, Cancer, and Alzheimer’s.
- The standardized approach to implementation and educational requirements offered through the project’s clinical guidelines and contracting models contributed to the overall successes of the program.

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- Project milestones affiliated with the Patient Centered Medical Home (PCMH) and hospital partner contracts helped to build and expand infrastructure, policies and procedures, workflow and create systems of care.
- Each county has a wide variety of services that affected the feasibility of palliative care implementation.
- The Palliative Care Information Act (PCIA) & Palliative Care Access Act (PCAA) (Public Health Law §2997-d), which requires that hospitals, nursing homes and home care agencies provide access to information and counseling regarding options for palliative care services that are appropriate to patients with advanced life limiting conditions and illnesses should be standardized and enforced.
- The culture and understanding of palliative care in healthcare and in general affects implementation and reform. There is a significant need to continue palliative care education initiatives, both for patients and providers.

CCN sought feedback from the area community members and Medicaid members through an online survey to the CCN member panel.

- Overall, 41% have discussed a serious condition with a primary care provider (either for themselves or those they are caring for) in search of a way to relieve pain, stress, and/or other symptoms that are commonly associated with chronic illness and known to be treated through palliative care.
- Of those who have discussed palliative care, 58% recall their primary care provider
 - providing information and/or a referral to a palliative care service, or another associated support service. 93% would describe it as a positive experience.
 - 90% of respondents believe having their providers ask about palliative care is important.

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Table 2: Total Project Engagement and Total CCN Spending

CCN engaged 9 unique organizations, 2,822 unique members, provided 7,218 total services, and distributed \$1.4 million DSRIP dollars for this project. The following tables display partner engagement, service provision, and CCN funds distributed from DSRIP Year 2 through Year 5, which ended March 31, 2020.

Table 2a: Palliative Care - PCMH Integration Model Partner Engagement by Organization Type					
	DSRIP Year				
	DY2	DY3	DY4	DY5	Grand Total
Health Systems	3	2	2	3	4
Non-Health System Partners	3	4	4	4	5
Grand Total	6	6	6	7	9

Source: CCN Team analysis using Navigation Project Data, 2016-2020.

Table 2b: Palliative Care - PCMH Integration Model Volume of Services by Organization Type					
	DSRIP Year				
	DY2	DY3	DY4	DY5	Grand Total
Hospital System					
A - Palliative Care Home Visit		4	5	74	83
A - Palliative Care service during PC visit	575	39	89	17	720
B - Palliative Care Phone Call			1		1
B - Palliative Care Referral		25	608	154	787
C - eMOLST		1	2	2	5
D - IPOS		87	118	30	235
F - Goals of Care			14	18	32
G - Advanced Care Planning		3	19	4	26
Non-Hospital System					
A - Palliative Care Home Visit	1	1	122	237	361
A - Palliative Care service during PC visit	246	606	982	975	2,809
B - Palliative Care Phone Call			258	490	748
B - Palliative Care Referral		88	87	67	242
C - eMOLST			1	24	25
D - IPOS		27	193	272	492
F - Goals of Care			170	356	526
G - Advanced Care Planning			53	73	126
Grand Total	822	881	2,722	2,793	7,218

Source: CCN Team analysis using Palliative Care PCMH Integration Model Project Data, 2016-2020.

Table 2c: Community-Based Navigation Expenditure by Project Activity					
	DSRIP Year				
	DY2	DY3	DY4	DY5	Grand Total
Business Plan Payment		\$0	\$0	\$10,000	\$10,000
Disruptive Payment		\$47,694			\$47,694
Hospice - FTE		\$40,000			\$40,000
Hospice - Patients Receiving Services		\$0	\$17,600	\$0	\$17,600
Hospice - Patients Receiving Svcs.		\$15,800			\$15,800
Hospice FTE Start-Up Funding - Participating PCMH Referral & Home Visit		\$0	\$10,000	\$0	\$10,000
New Patient Onboarding		\$0	\$13,600	\$54,000	\$67,600
Palliative Care or Referral Services		\$0	\$0	\$660	\$660
Palliative Care Panel of Services		\$0	\$60,800	\$219,200	\$280,000
PC Physician Engagement Strategy Payment		\$0	\$0	\$10,000	\$10,000
PCMH - EHR Demonstration		\$5,000	\$0	\$10,000	\$15,000
PCMH - Guideline/WF Milestones		\$0	\$15,000	\$130,000	\$145,000
PCMH - Palliative Care Outcome Scale	\$20				\$20
PCMH - Patient Visit w/P-Care	\$432,500				\$432,500
PCMH - PMPM		\$48,540	\$102,760	\$66,290	\$217,590
Planning Committee Payment		\$0	\$0	\$10,000	\$10,000
Prepayment		\$53,460			\$53,460
Retro Disruptive Payment		\$3,900			\$3,900
Sign-On Bonus		\$34,660	\$34,200	\$0	\$68,860
Start-up Funding		\$0	\$10,000	\$10,000	\$20,000
Training Payment		\$0	\$0	\$2,000	\$2,000
Workflow Payment		\$0	\$0	\$10,000	\$10,000
Grand Total	\$432,520	\$249,054	\$263,960	\$532,150	\$1,477,684

Source: CCN Team analysis.

Quantitative Findings

Section 1: Cross Section and Trend Analysis

This section presents a quantitative regression analysis to establish a statistical relationship between the PCMH Integration model project activities and proxy measures for the DSRIP performance metrics. Performance metrics featured prominently in the DSRIP program, driving a significant portion of funding. The underlying question assessed in this section is: did the project make an impact on CCN’s performance metric results? This is an important question as CCN considers areas of future investment and the overall return of participating in the DSRIP project.

For Palliative Care, we considered the impact of the Palliative Care services (PCMH Integration Model only) on the likelihood that individuals incurred potentially preventable ED services (total and among those with a behavioral health diagnosis), inpatient hospital care, and primary care. These measures are proxies for key DSRIP performance metrics, including Potentially Preventable ED Visits (total), Potentially Preventable ED

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Visits among members with previous Behavior Health diagnoses, Preventive or Ambulatory Care visits, and Prevention Quality Indicator (Composite), which captures potentially avoidable hospital care. These metrics were chosen for analysis based on a CCN Project Team analysis in 2016, which identified a probable impact of the project activities on the performance metrics.

The table below describes each Performance Metric and proxy measure as well as the study hypotheses. Through the Palliative Care, partners provided direct palliative care services, advanced planning, and referrals to palliative care provided by outside agencies. By addressing patient needs, it is hypothesized that the Palliative Care services program reduced the need for emergency services that may be better addressed elsewhere (i.e. potentially preventable) as well as the need for inpatient hospital care.

Table 3: Performance Metrics and Proxy Measures		
Metric Name / Proxy	Description	Study Hypothesis
Potentially Preventable ED Visits, per 100 Members Proxy measure: Having one or more Potentially Preventable ED visits	The number of potentially preventable ED visits (based on CPT codes reported on claims) among Medicaid Members, as defined by the NYU metric definition ¹⁵ , per 100 members.	Palliative Care services provided to individuals can help address underlying needs and direct individuals to services, thereby alleviating urgent needs which drive them to seek care in the ED. We hypothesize a decline in the likelihood that an individual has any ED visits after receiving Palliative Care services.
Potentially Preventable ED Visits – Behavioral Health, per 100 Members Proxy measure: Having one or more Potentially Preventable ED visits, among members with a Behavioral Health diagnosis	The number of potentially preventable ED visits (based on CPT codes reported on claims) among Medicaid Members, as defined by the NYU metric definition. The analysis population is limited to members with a behavioral health diagnosis, per 100 members.	Same as above. We hypothesize that individuals with behavioral health diagnoses (mental health and substance use disorder) will be more likely to seek care and services in other settings following Palliative Care services.
Prevention Quality Indicator – Overall Composite (#90) Proxy measure: Having one or more inpatient hospitalizations	The number of inpatient discharges, defined by revenue codes reported on claims.	Palliative Care services provided to individuals can help address underlying needs and direct individuals to services, thereby alleviating urgent needs. We hypothesize that individuals will be less likely to require inpatient care following a Palliative Care.
Adult Access to Preventive and Ambulatory Care	The percentage of members with one or more ambulatory and	Palliative Care services provided to individuals can help address underlying needs and direct individuals to services,

¹⁵ Billings, J., Parikh, N., & Mijanovich, T. (2000). Emergency department use in New York City: a substitute for primary care? *Issue brief (Commonwealth Fund)*, (433), 1–5.

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Proxy measure: Having one or more primary care visits	preventive care visits (defined by E&M Codes reported on the claim).	including primary care. We hypothesize that individuals will be more likely to use primary care services following Palliative Care services.
Source: CCN Team Analysis based on input from CCN Project Teams and NY DOH DSRIP Project Toolkits. ¹⁶		

The Population Health Team derived the statistical association between the activities undertaken during the project and key HEDIS measures. Cross-sectional data analysis is conducted with project activities being the independent variable and HEDIS measures like PPV, PPR etc. being the main dependent variable. The Odds ratio gives the likelihood of association between key outcomes and activities undertaken during the project from July 2016 to June 2019 (i.e. Measurement Year 2 (MY2) to Measurement Year 5 (MY5) for the Medicaid population attributed to CCN. An Odds Ratio greater than 1 signifies greater likelihood of statistical association, whereas an Odds Ratio less than 1 signifies lesser likelihood of association. For measures like Primary Care (PC) visits, a greater likelihood (odds ratio > 1) is desired. However, for measures like potentially preventable ED Visits, Inpatient discharges etc., a reduced likelihood (Odds Ratio < 1) is desired. An Odds Ratio indicated in red means that it is the opposite sign of the statistical association that we would like to see and evaluate.

Table 4: Analysis Sample Size and Service Volume for Selected Health Care Services		
	No Palliative Care	Received Palliative Care
Medicaid Members CCN Attributed Volume	86,198	651
Medicaid Members with 1+ PPVs	40,981 (47%)	327 (50%)
Medicaid Members with 1+ PPV (Behavioral Health)*	7,283 (50.9%)	174 (1.2%)
Medicaid Members with 1+ Inpatient Admission	8,392 (9.7%)	132 (20%)
Medicaid Members with 1+ Primary Care	82,301 (95.4%)	644 (98.9%)
Source: CCN Team analysis using CCN project data, Salient Interactive Miner, and Medicaid Claims data from the MY5 Attributed population, July 2016 to June 2019. *PPVs (Behavioral Health) refers to PPVs among members with one or more behavioral health diagnosis.		

To test these hypotheses, we pooled data from a few sources: 1) project data submitted by partners over the course of the project, 2) Medicaid claims data received by DOH and maintained by CCN, and 3) data pulled from Salient Interactive Miner data system, which reflects Medicaid claims and administrative information. Our quantitative analysis is limited to Medicaid members who were attributed to CCN in Measurement Year 5 and who elected to enable downstream data sharing through the NY DOH opt out

¹⁶NY DOH DSRIP Toolkits available at here: https://www.health.ny.gov/health_care/medicaid/redesign/docs/dsrrip_project_toolkit.pdf (Accessed October 15, 2020).

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process. Out of total 86,849 CCN Attributed Medicaid members above, 651 (0.7%) members received palliative care services were conducted between July 2016 and May 2019. Out of these 651 Palliative Care services, 327 (50%) members received palliative care services that were followed at least one PPV, 132 (20%) members were followed by one or more hospitalizations, and 644 (98.9%) were followed by at least one primary care encounter during the total analysis period (July 2016 through May 2019). These data reflect performance and outcomes among patients engaged in the PCMH integration model and does not reflect outcomes of the Community-Based Palliative Care Pilot program. Table 4 describes the study population.

The regression analysis excludes some Medicaid members who received Palliative Care services under the project due to unavailable outcomes data. Out of the total 2,550 total members engaged in the Palliative care project, 1,222 were not attributed to CCN in the final measurement year (MY5). Because this population is not attributed to CCN, CCN cannot access PHI level data on ED visits, hospitalizations, or primary care visits. Attribution changes month to month based on a number of factors including Medicaid program enrollment and patterns in utilization. Once a member becomes unattributed, access to detailed information ceases. For this reason, we focused on the population attributed to CCN in the final measurement year. In addition, it should be noted that data on medical encounters with a primary diagnosis related to substance use disorders are excluded from the data available to CCN due to privacy reasons.

In the following sections, we consider the statistical relationship between Palliative Care services and important health outcomes that the 3gi project is designed in impact: Potentially Preventable ED Visits, hospitalizations, and care engagement (primary care and other measures). For Palliative Care services to have a probable causal impact on PPVs and hospitalizations, we would expect to see a negative association: PPVs and hospitalizations should be less frequent following palliative care services as patient needs are addressed in other settings, by the appropriate medical care providers. Similarly, if palliative care services improve care engagement, we would expect a positive association with primary care utilization and other forms of care engagement. To test these associations, we consider utilization before and after the provision of palliative care services. A cross sectional analysis allows us to control for person-level characteristics that may also impact utilization. The cross-sectional analysis tests for an overall association between project engagement and our health outcomes.

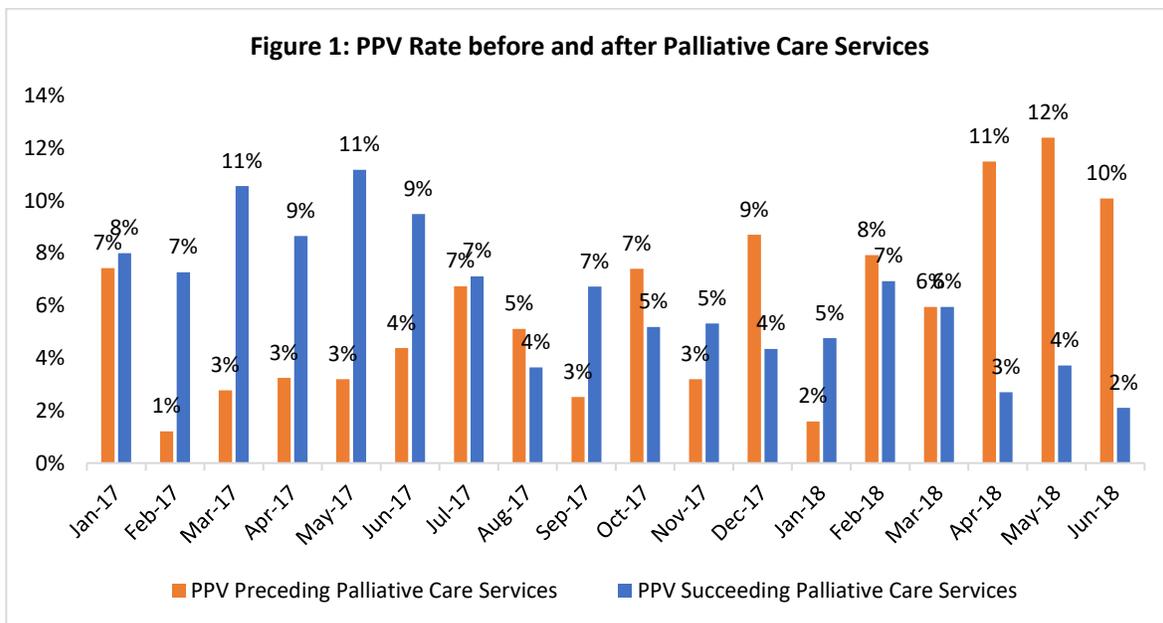
For the cross-sectional analysis, we used logistic regression models to statistically relate the performance metric proxy variables to the palliative care services. We tested whether Medicaid members who received palliative care services were less likely to also have one or more PPVs than their counterparts, less likely to have any type of hospital admission, and/or more likely to have at least one primary care visit. The logistic model yields an Odds Ratio, which is a measure of association between an “exposure” and an “outcome”. In this analysis, the palliative care services are the “exposure.” The “outcomes” include having a PPV, hospital admission, and primary care visit.¹⁷ In this example, the Odds Ratio represents the odds that a Medicaid member will experience a PPV given the member also received a palliative care service, compared to the odds of experiencing a PPV in the absence of any palliative care services. Person-level variables including age, gender, and county were used as control variables.

¹⁷ [Szumilas, M. \(2010\). Explaining odds ratios. *Journal of the Canadian Academy of Child and Adolescent*, 19\(3\), 227–229.](#)

Potentially Preventable ED Visits

Pre/Post Analysis among Attributed Members who Received Palliative care Services

In Figure 1, we present monthly proportions of attributed Palliative Care services that had a PPV in the year following and before Palliative Care services. In total, there were 2,841 Palliative Care services offered to CCN attributed medicated members between January 2017 and June 2018¹⁸. Cumulatively, 187 palliative care services were followed by a PPV in the year following Palliative Care services (6.6%); and 174(6.1%) palliative care services before care transition services in the year before Palliative Care services. PPVs had to occur within 365 days of the Palliative Care. The proportion varies month to month, with some outliers. The trend is downwards. The declining trend indicates that the PPVs were less likely following a Palliative Care over time. The rate differentials in most months and differing trend lines suggest that palliative care services can impact potentially unnecessary or avoidable use of the Emergency Room. However, these differences are not regression adjusted to control for factors which may affect the PPV rate other than the project services and the rates are not statistically significant.



Note: Figure 1 depicts the percentages of palliative care services offered to CCN Attributed Medicaid members which were preceded and succeeded by one or more PPVs within a year of the Palliative Care services, by month of Palliative Care. For example, 8% of palliative care services in January 2017 had a PPV in the following year.

Cross Sectional Analysis

A cross-sectional analysis was conducted to statistically test whether attributed Medicaid members who received palliative care services under the 3gi program were less likely to have a PPV (and similarly, hospitalization or primary care visit (discussed below)) than other attributed members. The comparison is made to the larger attributed population and is not limited to a subgroup. Statistical significance is noted with * (10% significance (modest)), ** (5% (medium)), or *** (1% significance (high)). The cross-sectional results indicate that PPVs are more common among those engaged in the project, which is not the desirable effect. However, this test may be too high of a bar – it does not take the timing of PPVs and palliative care services into account. This test does not narrow in on the chance of PPV after having received palliative

¹⁸ We limit our analysis to Palliative Care services that occurred before June 30, 2018 so that we could have at least 365 days after the Palliative Care service to observe a PPV, hospitalization, and primary care visit.

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care services, but looks at all times. Moreover, PPVs may be more common among anyone with a hospital admission than the general population. Those who received a Palliative Care service were 34% and 71% *more likely* than those who did not receive Palliative Care services to have at least one potentially preventable ED visit and potentially preventable ED visit with a diagnosis of Behavioral health conditions, respectively. In the context of the positive association in the cross-sectional analysis shown in table 5a below, members who received palliative care services may be more likely than others to experience PPVs at any time. The cross-sectional analysis does not account for the timing of Palliative Cares relative to PPVs or other outcomes.

Table 5a: Cross Sectional Analysis - Potentially Preventable ED Visits			
Outcome Measure	Odds Ratio	Interpretation	Score Card Points (15)
Indicator variable for 1+ Potentially Preventable ED visits	1.34***	Palliative Care services are associated with a 34% greater likelihood of having at least one potentially preventable ED visits.	0
Indicator variable for 1+ Potentially Preventable ED Visits (Behavioral Health Population)	1.71***	Among members with a behavioral health diagnosis, Palliative Care services are associated with a 71% greater likelihood of having at least one potentially preventable ED visits.	0
Source: CCN Team analysis using CCN project data, Salient Interactive Miner, and Medicaid Claims data from the MY5 Attributed population, July 2016 to June 2019. PPVs (Behavioral Health) refers to PPVs among members with one or more behavioral health diagnosis. Refer to the appendix for detailed scoring criteria.			

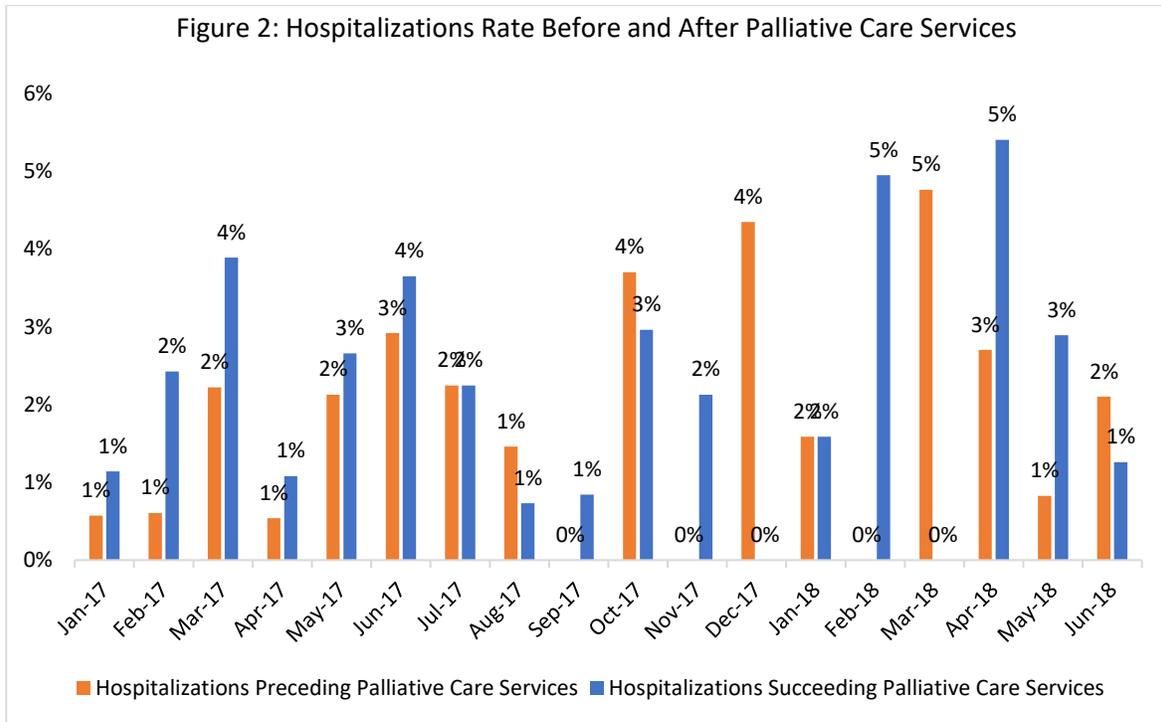
With the comparison of PPVs preceding and succeeding palliative care services and the cross-sectional results in mind, we conclude that there is some evidence that the palliative care services have had a positive impact on health outcomes. While these services do not appear to have reduced the overall chance of PPV on net compared to the general population, among those engaged the likelihood of PPV following receipt of palliative care services is lower than before receiving those services.

Hospitalizations

Pre/Post Analysis among Attributed Members who Received Palliative Care Services.

In Figure 2, we present a similar graph, now considering inpatient admissions which occurred within a year of a Palliative Care service. In total, there were 2,841 palliative care services offered between January 2017 and June 2018. Cumulatively, there were 68 palliative care services (2.4%) that were followed by a hospitalization in the year following their Palliative Care service and 50 palliative care services (1.8%) that were preceded by hospitalizations in the year before Palliative Care service. Over time, the rate of hospitalization after having received the palliative care services increases during the latter DSRIP months. The rate differentials between hospitalizations before and after project engagement in most months suggest that palliative care services are not effective in reducing hospitalizations. These differences are not regression adjusted to control for factors which may affect the PPV rate other than the project services and the rates are not statistically significant.

Considering the erratic and only weakly declining trend in hospitalizations until September 2017, it does not appear that Palliative Care has had an impact on hospitalizations



Note: Figure 2 depicts the percentages of navigated CCN Attributed Medicaid members who had one or more hospitalizations succeeding and preceding Palliative care services within a year of the Palliative Care, by month of Palliative Care. For example, 1% of palliative care services offered in January 2017 were followed by a hospitalization in the following year.

Again, in the context of the positive association in the cross-sectional analysis as shown in the section below, members offered palliative care services may be more likely than others to experience hospitalizations at any time. Those who received a Palliative Care service were 87% more likely than those who did not to have at least one inpatient admission. There is an odd of 6.68 greater likelihood of one inpatient admission related to adult prevention quality indicators after having received Palliative care services. However, the cross-sectional analysis does not account for the timing of 3gi Services relative to the hospitalizations.

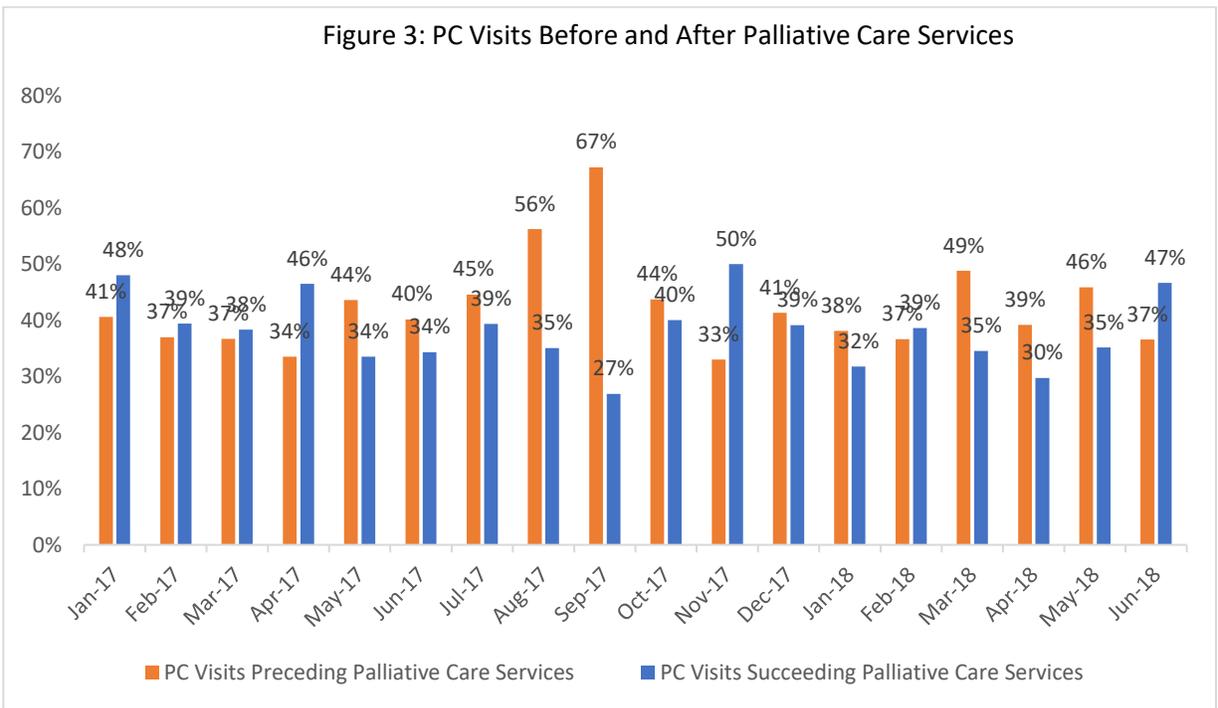
Table 5b: Cross Sectional Analysis – Inpatient Admissions			
Outcome Measure	Odds Ratio	Interpretation	Score Card Points (15)
Indicator variable for 1+ Inpatient Discharges	1.87***	Palliative Care services are associated with an 87% greater likelihood of having one or more inpatient discharges.	0
Indicator variable for 1+ Potentially Avoidable Inpatient Discharges (PQI)	6.68***	Palliative Care services are associated with a 6.68 greater likelihood of at least one inpatient admission related to adult prevention quality indicators.	0

Source: CCN Team analysis using CCN project data, Salient Interactive Miner, and Medicaid Claims data from the MY5 Attributed population, July 2016 to June 2019.

Primary Care Visits

Pre/Post Analysis among Attributed Members who Received Palliative Care Services.

Finally, in Figure 3, we present the trend in the proportion of palliative care services that were preceded and succeeded by a primary care visit in the year after their Palliative Care service. In total, there were 2,841 palliative care services offered between January 2017 and June 2018. Overall, there were 1,093 (38%) palliative care services that were succeeded by at least one primary encounter in the year following the Palliative Care. And there were 1195 (42%) palliative care services that were preceded by at least one primary encounter in the year before the Palliative Care. Primary Care engagement before project engagement is higher in most months than primary care engagement after project engagement. However, the rate differentials before and after project engagement are not statistically significant. This graph demonstrates a moderately stable trend in late DSRIP years at 40% on average, suggesting that Palliative Care services were somewhat effective in connecting members to medical care services. However, that is not consistent through analysis period, where follow ups with primary care declines in the early DSRIP months. Moreover, given that the decline in primary care follow up occurs at the same time as the declines in PPVs and hospitalizations, it appears that Medicaid members who received palliative care services are not increasing their primary care as a substitute care setting to the emergency room.



Note: Figure 3 depicts the percentages of navigated CCN Attributed Medicaid members who had one or more primary care encounter within a year of the Palliative Care, by month of Palliative Care. For example, 48% of those who received Palliative care services had a hospitalization in the following year.

Cross Sectional Analysis

A cross-sectional analysis was conducted to statistically test whether attributed Medicaid members who received palliative care services under the 3gi program were more likely to engage in care engagement like cardiovascular and diabetes monitoring, mental health, and substance use disorder treatment services, or to fill antidepressant and statin medications. Statistical significance is noted with * (10% significance (modest)), ** (5% (medium)), or *** (1% significance (high)). The cross-sectional results indicate that these forms of care engagement are more common among those engaged in the project, which is the intended

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effect. However, the cross-sectional results do not account for the timing of when palliative care services occurred relative to the care engagement indicators.

The cross-sectional results show that those engaged in the project were also more likely than the general attributed population to engage in care engagement in general. There are positive associations between project engagement and engagement in services. Attributed Medicaid members who received palliative care services were more likely, as seen in the Odds Ratios greater than 1.0, than the general attributed population to also engage in mental health care, substance use disorder treatment services, and antipsychotic and statin medication fills. However, there is no significant association found between receiving palliative care services and antidepressant medication fills. Table 5c presents the results from these regression models and provides a brief interpretation of the results.

Outcome Measure	Odds Ratio	Interpretation	Score Card Points (15)
Indicator for 1+ Antipsychotic Medications Fill	2.16***	Palliative Care services are associated with a 2.16 greater likelihood of one or more antipsychotic medications fills.	15
Indicator for 1+ Antidepressant Medication Fill	No Significance	No significant relationship between Palliative Care services and antidepressant Rx fills.	0
Indicator for 1+ Cardiovascular Disease Monitoring	2.60***	Palliative Care services are associated with a 2.60 greater likelihood of monitoring cardiovascular disease (Lipid panel, etc.) among Medicaid Members.	15
Indicator for 1+ Diabetes Monitoring Test	1.70***	Palliative Care services are associated with a 70% greater likelihood of completing Diabetes screening/monitoring (HbA1C test).	12
Indicator for 1+ Mental Health Visits	1.94***	Palliative Care services are associated with a 94% greater likelihood of completing Diabetes screening/monitoring (HbA1C test).	15
Indicator for 1+ Statin Therapy Medication Fills	2.46***	Palliative Care services are associated with a 2.46 greater likelihood of filling Statin therapy medications	15
Indicator for 1+ Alcohol and Other Treatment Services	7.35***	Providing a Palliative Care service is associated with an odd of 7.35 greater likelihood of being treated for Alcohol and Other drugs diagnosis among Medicaid Members.	15

Source: CCN Team analysis using CCN project data, Salient Interactive Miner, and Medicaid Claims data from the MY5 Attributed population, July 2016 to June 2019. Refer to the appendix for detailed scoring criteria.

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Summary of quantitative findings:

Summarizing the relationship between Palliative Care and the three outcomes of interest, this analysis suggests that Palliative Care may be effective in encouraging clients to seek care in settings other than the emergency rooms. The effect of Palliative Care is not strong enough to see in a cross-sectional analysis of PPVs or Hospitalizations (which is understandable); the trend analysis suggests the desired impact for periods of time but not necessarily across the board.

Thus, based on the cross-sectional analysis, it appears that community-based Palliative Care may be effective in promoting greater use of care engagement services, but not sufficient to reduce potentially avoidable utilization of emergency rooms or overall need for hospital care. Based on these results, we awarded 7.9 points toward the Palliative Care Project Impact Scorecard in regards to the Project Impact on Performance Metric Results component. For the trend analysis over time, since we don't see an improvement in key metrics, we assigned no points.

	Cross Section (15)	Causal Effect (6)
Potentially Preventable ED Visits	0	0
Inpatient Hospitalizations	0	0
Primary Care Engagement	7.9	0
Total Points Assigned to Score Card	7.9	0

Section 2: Cost-Effectiveness Analysis

Cost effectiveness is a measure of the value of an initiative, project, or program stated in terms of its anticipated benefits. For the DSRIP projects in general, CCN sought to improve patient outcomes among those engaged in the project. Patient outcomes are measured in terms of the reduction in unnecessary use of the emergency room, a reduction in hospitalizations, and increases in primary care engagement. Therefore, cost effectiveness of the projects is defined in these terms.

The cost-effectiveness analysis builds off the pre/post analysis presented above. Total Savings reflects the value of avoided utilization of emergency room care, inpatient hospital care, and primary care due to the project. This measure is an estimate of the value of the project, comparing utilization before and after project engagement.

Total Savings is calculated by comparing utilization before and after project engagement. Total Savings is a one-year estimate of savings accruing to the health care system at large, attributed to the project activities. The estimates presented in Table 7 are on figures from DSRIP Year 4, including pre- and post-utilization among MY5 attributed Medicaid members engaged in the project between July 2017 and June 2018 and published cost estimates for ED visits, inpatient care, and primary care encounters (which reflect

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charges).^{19,20,21} For each utilization type, savings is estimated based on the change in utilization and the cost factor. Total Estimated Savings is a summation across the three measures; the reduction in ED and inpatient care is partially offset by the increase in expenditures for primary care services. Total Estimated Net Savings is calculated by subtracting the variable costs associated with operating the palliative care project in DSRIP Year 4. Net Estimated Savings per Project \$ is a measure of the cost effectiveness or return on investment per dollar spent on the project. For 3gi project, we observed a reduction in ED volume by 54, however, the hospital admissions increased by 17 and primary care engagement volume decreased by 104 after project engagement as compared to before the project engagement. Since the difference in average rate of engagement before and after project engagement is not statistically significant, the total estimated savings due to avoided utilization is zero and the net savings per project dollar is also zero.

	Avoided ED Visits	Avoided Hospital Admissions	Increased Primary Care Visits	Total Estimated Savings due to Avoided Utilization	Project Variable Costs	Total Estimated Net Savings	Net Estimated Savings, per Project \$
Palliative Care services	54	(17)	(104)	\$ 0	\$ 194,760	\$ 0	\$ 0

Source: CCN Team analysis

This cost effectiveness analysis focuses on the fully-implemented value of the project services. We exclude fixed costs from this analysis. While each DSRIP project required infrastructure investment by CCN and its partners, these investments were largely completed by DSRIP Year 4. Excluding fixed costs from the analysis is appropriate in order to make a more direct comparison of service-related variable costs between the project and their health impact. Including fixed costs may unduly weight the analysis against the projects since the fixed cost savings related to ED visits, hospitalizations and primary care utilization are not directly reflected in the service charges. We analyzed each project independently and assume the results are independent. While there was overlap in patient engagement across the projects, it was relatively minor. We do not anticipate that overlap in project engagement causes cross-contamination of results. Since the palliative care project does not show cost effective returns on investment, we assigned zero points as stated in the scorecard below:

	Score Card (4)
Potentially Preventable ED Visits	0
Inpatient Hospitalizations	0
Primary Care Engagement	0
Total Points Assigned to Score Card	0

Source: CCN Team analysis

¹⁹ Health Care Cost Institute (2019). The average emergency room visit cost \$1389 in 2017. Available from: [Average Cost of ER Visit \(2017\)](#)

²⁰2018 Hospital Adjusted Expenses per Inpatient day: Kaiser Family Foundation / State Health Facts Available from: [Hospital Adjusted Expenses per Inpatient Day\(2018\)](#). Data from 1999 - 2018 AHA Annual Survey, Copyright 2019 by Health Forum, LLC, an affiliate of the American Hospital Association. Note: Average length of stay in NY (2016) was 4.6 days. <https://www.aha.org/system/files/2018-07/2018-aha-chartbook.pdf>

²¹Health Care Cost Institute (2016-2017); Binghamton, NY Average (Office Visit – Primary Doctor – Established Patient – Moderate Complexity. Range is \$69-\$87. We used \$78 as a point estimate. Available from: [Average Cost of PC Visit in Binghamton](#)

Qualitative Findings

I. Project Specific Feedback from Partners

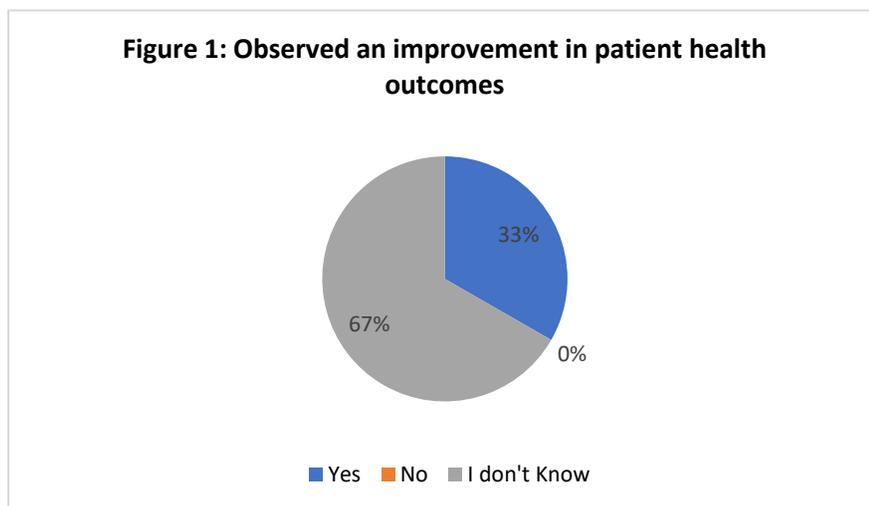
In-depth interviews were conducted with select partners who were involved in project 3gi.

a) Patient Outcomes

Interview Question	Rating	Feedbac	Score
Extent project has made a positive impact on patients/clients	★★★★☆ (4.3)	Our partners stated that by attending various trainings, and utilizing opportunities to facilitate and coordinate with other organizations involved in palliative care, enhances the work that they do,	5
Extent project activities make a positive long-term impact on patients/clients	★★★★★	Partners stated that collaboration helped expand their out-patient service and as a result they have more locations and opportunities to see patients. Additionally, they have offered some significant community training that has a long-term benefit to the community as a whole and to the patients	5
Average			5

Figure 1: Observed an improvement in patient health outcomes

33% of respondents said yes. 67% said they don't know. As an example, a partner involved with the project discussed a chronically ill patient with many prior hospitalizations that was referred to their agency for palliative care. Through the agency's palliative care team, the patient received emotional support and his ED visits decreased significantly.



b) Cost of Care

Table 2: Cost of Care			
Interview Question	Rating	Feedback	Score
Extent project activities reduction in cost of care long term	★★★★★ (4.7)	Few issues like breathing issues that can be solved over phone, reduces ER visits, saves about \$2600 per patient. Customer loyalty wherein patients return to the organizations for palliative care	5

c) Lasting Partnerships

Figure 2: Partnerships

100% of the respondents said that project 3gi provided them with opportunities to partner with others and they would continue these partnerships after the project concludes. 66.7% respondents said that these partnerships were successful whereas 33.3% said that they were not, the reason being that the hospital already had hospice, home care, network of physicians and acute care facility. One of the partners stated that as a result of partnerships developed during this project coordination between hospice care and hospital improved. Another partner stated that the local community trainings that they have offered which CCN helped facilitate, increased their partnerships with local agencies.

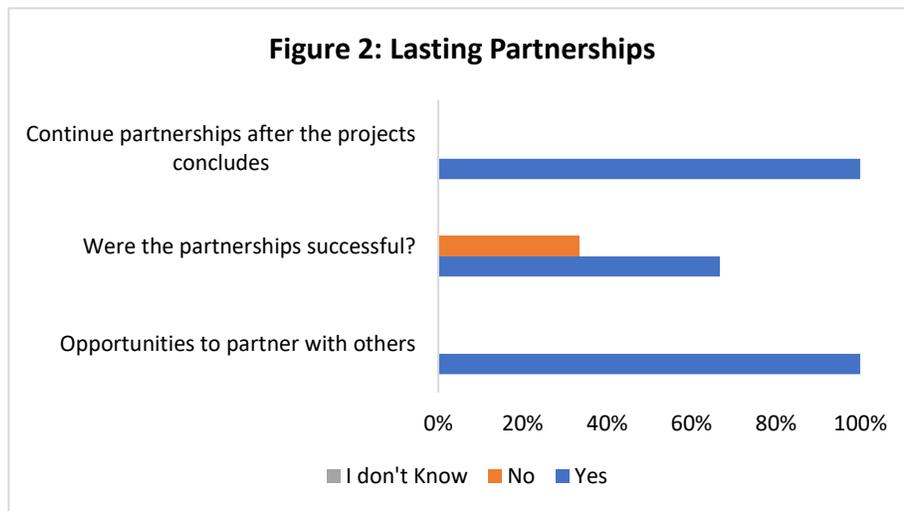


Table 3: Lasting Partnerships			
Interview Question	Rating	Feedback	Score
Extent the project activities have improved coordination of patient care	★★★★★ (4.3)	Increase in referrals and education showed improvement in patient services. More workforce devoted to palliative care would encourage better coordination.	5

d) Workforce Development

When asked about how many positions were involved in this project, one partner said 1 to 1.5, another said 9 and third one said 12-15 positions. A variation in responses was also noted on how much the project activities consumed their time on average. Interviews were conducted with two major hospitals and an independent consulting firm. One partner said minimal, another said less than half and the third one said more than half. The graph below highlights the rating that respondents gave on a scale of 1 to 5 with 1 being “Not at all” and 5 being “Completely”

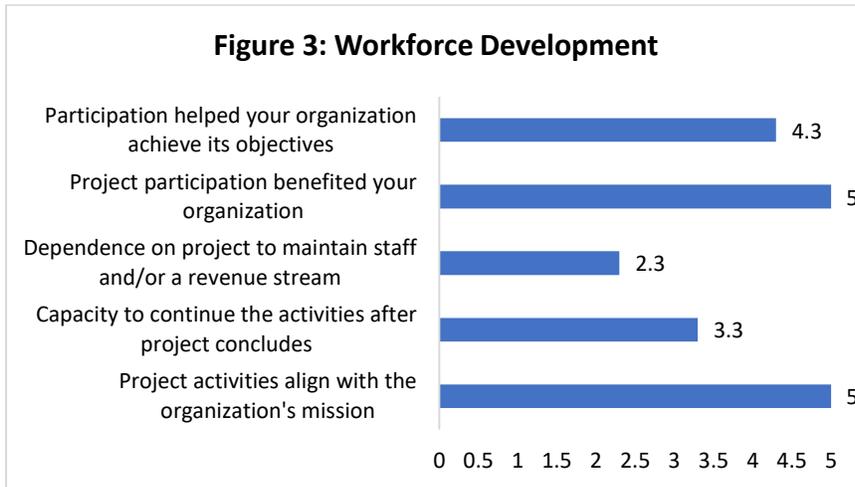
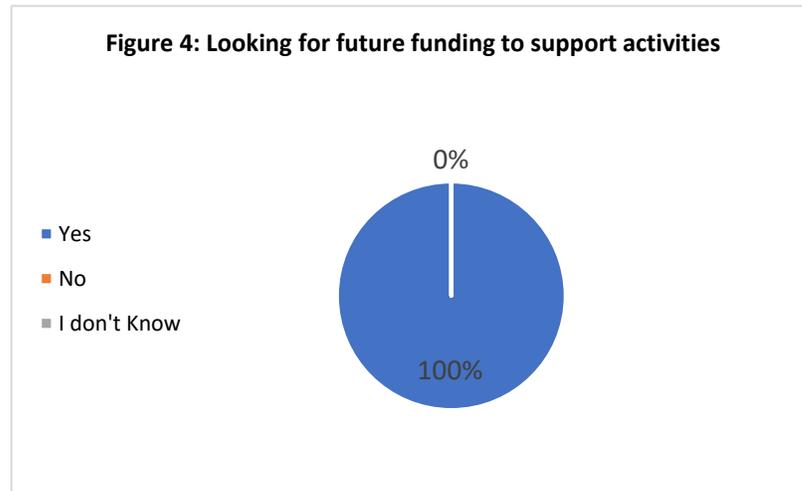


Figure 3: Workforce Development

When asked about whether the extent to which project activities align with the organizations mission, respondents gave it a rating of 5. When asked if they have the capacity to continue activities after the project concludes, partners gave it a rating of 3.3. One of the partners pointed out that it would be financially challenging for them to continue activities after the project concludes. When asked about the extent to which the organization depends on the project to maintain staff and/or revenue stream, the partners gave it a rating of 2.3.

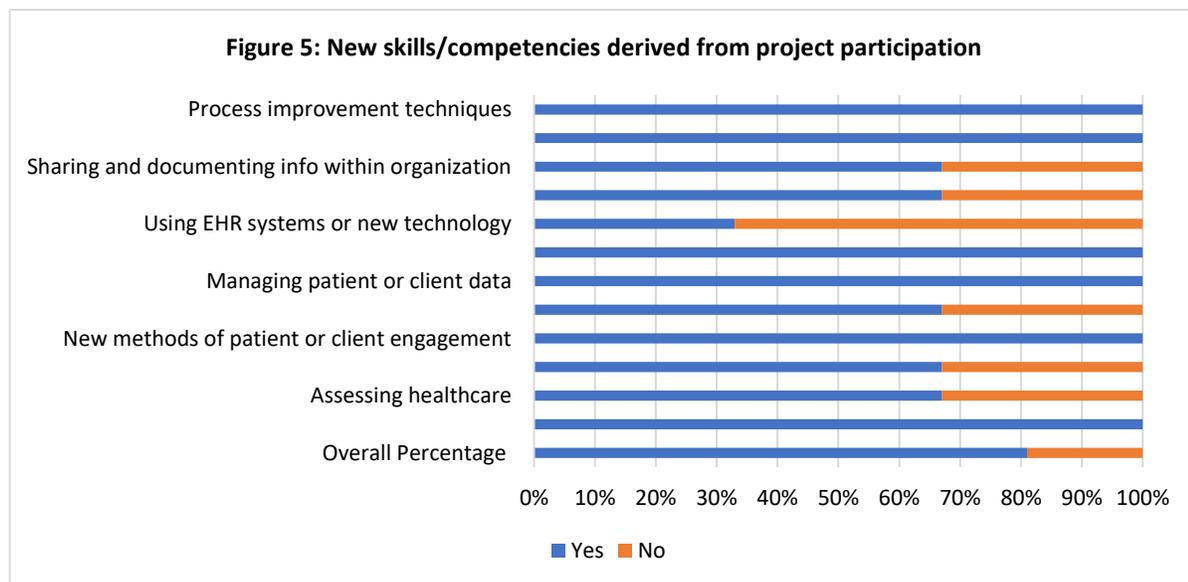
When asked about whether the project benefitted their organization, 100% of the respondents indicated that the contribution is significant and gave it a rating of 5. Additionally, when asked whether participation helped their organization achieve its objectives, they gave it a rating of 4.3.

Figure 4: Organizations Looking for Future Source of Funding



When asked about whether the partners engaged with 3gi are looking for future sources of funding, 100% of the respondents said yes. As a follow up question, when asked if their staff will be downsized or redeployed if the project is discontinued, 33.3% respondents said they would redeploy their staff and 66.7% said they don't know.

Figure 5: New skills/competencies derived from project participation



81% of the respondents said that they developed new competencies and skills as a result of this DSRIP Project. However, 19% said they didn't. In particular, 67% of the respondents said that they are not using EHR system or new technology.

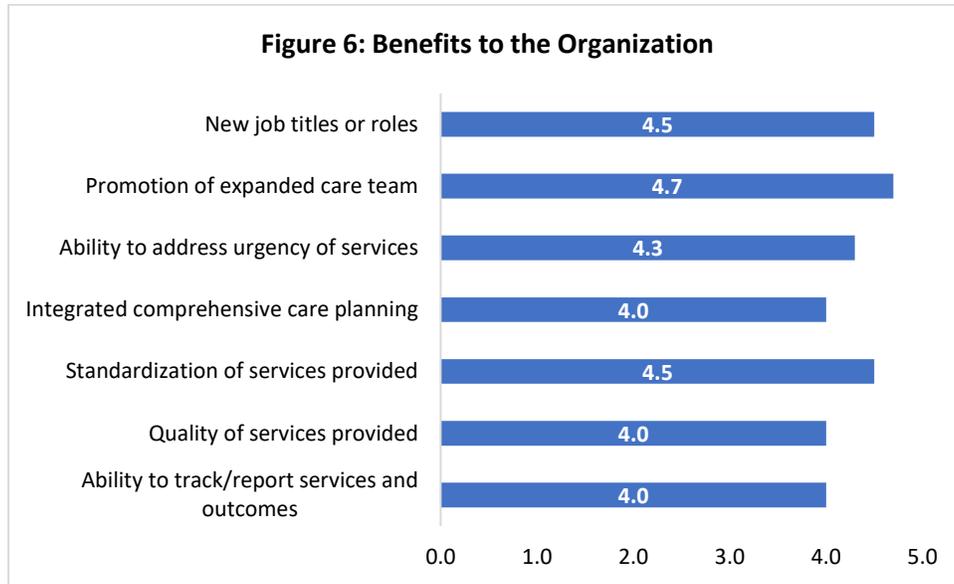
100% of the respondents said that they have developed the following new skills:

- a. Assessing social care needs

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- b. New methods of patient or client engagement
- c. Managing patient or client data
- d. Assessing and understanding impact of our organization's provided services
- e. Sharing and documenting info with other organizations
- f. Process improvement techniques

Figure 6: Extent to which participation benefited our partner organization



When asked to what extent participation in the project benefitted our partner organizations, the overall ranking ranged between 4 and 5 on a scale of 1 to 5 where 1 being “Not at all” and 5 being “Significant”. In terms of ability to track and report on services/outcomes and quality of services provided, respondents rated it a 4 out of 5. Regarding the standardization of services provided, partners ranked it at 4.5. Integrated comprehensive care planning is rated 4. Ability to address urgency of services is ranked at 4.3. In terms of promotion of expanded care team and creating new job titles/roles partners rated it 4.7 and 4.5 respectively.

Table 4: Scoring of Workforce Development Questions

Questions	Rating	Score
Project activities align with the organization's mission	★★★★★	5
Capacity to continue the activities after project concludes	★★★★☆	3.5
Project participation benefited your organization	★★★★★	5
Participation helped your organization achieve its objectives	★★★★☆	5
Ability to track/report services and outcomes	★★★★☆	5
Quality of services provided	★★★★☆	5
Standardization of services provided	★★★★★	5
Integrated comprehensive care planning	★★★★☆	5
Ability to address urgency of services	★★★★☆	5
Promotion of expanded care team	★★★★★	5

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New job titles or roles	★★★★★	5
Average		4.86

Finally, to conclude feedback on Workforce Development, we asked a few general questions and received a rating as highlighted in the table below. A rating of 1 is “Minimal” and 5 is “Significant”.

Table 5: Workforce Development

Questions	Rating	Score
a. This DSRIP project has helped your organization prepare in performance-based contracts with payers.	★★★★★	5
b. This DSRIP project has helped your organization promote or develop our services.	★★★★★	5
c. This DSRIP project provided funding for activities that were otherwise unfunded.	★★★★★	5
d. This DSRIP project provided funding to train and/or expand your personnel in ways you would have not done ourselves.	★★★★★	5
e. This DSRIP project supported your organization to undertake activities that we see value in.	★★★★★	5
f. Your organization will continue the activities of this project after the DSRIP project completes.	★★★★☆	3.5
g. This DSRIP project has given your organization a platform to share best practices.	★★★★★	5
Average		4.86

e) System Transformation

To assess system transformation, we asked the partner a series of questions and got a rating as highlighted in the table below. A rating of 1 is “Not at all” and rating of 5 is “Completely”. The respondents could reply “Don’t know”.

Table 6: System Transformation			
Question	Rating	Feedback	Score
a. Better integration of services across settings or organizations	★★★★★	Patients discharged from the hospitals get referrals for palliative and home care. However, embedding palliative care in oncology has been a challenge due to lack of education and understanding	5
b. Ability to share data in real time to improve patient or client care	★★★★☆	No Feedback	3.5
c. Promotion of community-based services (over institutional care)	★★★★★	Successful in providing services at home rather than ER	5

d. Promotion of team-based care (more coordinated care; cross- organizational teams)	★★★★★	Team meetings within and outside the organization helped in more coordination care for patients	5
e. More efficient services that reduce waste in the system	★★★★☆	Reduced trips to ER have helped	5
f. Implementation of self- management goals	★★★★★	Empowered patients and their families to care at home.	5
g. Shift in staff mindset in addressing patient needs	★★★★☆	Implementation of IPOS has helped raised awareness at PCMH level of patient’s needs for palliative care	3.5
h. New billable service development	★★★★☆	Home visits and case management are now billable. This depends on the provider type and is not universally true.	3.5
Average			4.43

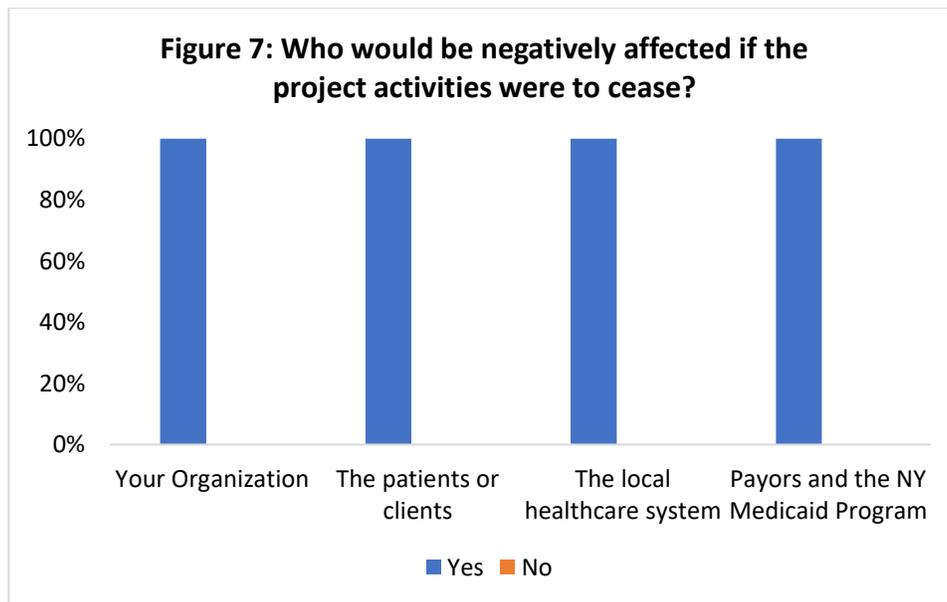


Figure 7: Who would be negatively affected if the DSRIP project was to cease 100% of the respondents said that everyone including their organization, the patients and clients, the local healthcare system, payors and the NY Medicaid program would be impacted.

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II. Project Specific Feedback from Project Managers

Milestone Rating and Feedback

Success on key milestones of this project have been evaluated by Project Manager at CCN in an in-depth interview:

Table 7: Milestone Rating and Feedback				
Milestone	Rating (10)	Success Factors (1.5)	Gaps	Score (10)
1. Integrate Palliative Care into PCPs that have, or will have achieved NCQA PCMH certification.	★☆☆☆☆	<ol style="list-style-type: none"> Empowered palliative care services through primary care services Developed relationship with hospice services and then to PCMH. 	<ol style="list-style-type: none"> Lower number of unique PCMH providers engaged than desired. The delivery of palliative care education to providers, patients and caregivers is still gaining momentum and needs more time. 	2
2. Develop partnerships with community and provider resources including Hospice to bring the palliative care support and services into the practice.	★★★★☆	<ol style="list-style-type: none"> Logical plan for providers to enact. Relationships with hospitals and primary care. Attempting to redefine what “referring to hospice” means. 	<ol style="list-style-type: none"> CBOs other than hospices were not initially engaged in contracting or other project activities. The hospice providers didn’t have the appropriate infrastructure/service offerings needed to provide community-based palliative care The referral system created through the contracting model preceded physician and patient education, as well as program establishment, which created a disconnect and hindered progress. 	7

<p>3. Develop and adopt clinical guidelines agreed to by all partners including services and eligibility.</p>	<p>★★★★★</p>	<p>1. Standardized approach for partners; set educational requirements, user-friendly guidelines.</p> <p>2. Developing a partnership with a CAPC (Center to Advance Palliative Care) in palliative care.</p> <p>3. Participation in courses, corporate membership to have access to courses</p>	<p>1. Physicians didn't want to take entry level palliative care classes</p> <p>2. Time component involved in taking these classes</p>	<p>10</p>
<p>Engage staff in trainings to increase role-appropriate competence in palliative care skills and protocols developed by the PPS.</p>	<p>★★★★★</p>	<p>1. Made guidelines/expectations clear for PCMH partners participating in milestone-based contracts.</p> <p>2. Desire on partner's end to improve the care they provide.</p> <p>3. Palliative Care Learning Center (PCLC Program)</p>	<p>No major gaps, though more intensive education needed for providers and families as the medical specialty of palliative care continues to evolve.</p>	<p>10</p>

<p>Engage with Medicaid Managed Care to address coverage of services.</p>	<p>★☆☆☆☆</p>	<p>We passed the milestone; but a long way to go.</p>	<p>There is an ICD 10 code for an “encounter for palliative care” (Z51. 5) to address coverage of services, but it is seldom used since there is no associated monetary value. Palliative care services can only be billed under the physician or NP providing the service, however, there is no mechanism for billing for providing services outside of medical services rendered at this time.</p>	<p>2</p>
<p>Use EHRs or other IT platforms to track all patients engaged in this project.</p>	<p>★★★★★</p>	<p>Integration of physical forms into EHRs on different activities like assessments and advanced care directives.</p>	<p>1. EHRs are still not customizable enough to meet needs of partners. 2. Challenge is to embed these documents and not create duplicates</p>	<p>10</p>
<p>Average</p>				<p>6.8</p>

b) Overall DSRIP Gaps in Care going forward

- Standardized education; understanding what palliative care is not just from a provider perspective, but also through the lens of patients, and their respective families and caregivers.
- Standardized adoption of palliative care principles within the PCMH environment
- How do we define palliative care in a way that is best suited for the perspective of families and Primary Care Providers (PCPs)?
- Geographical consideration

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- Achieving long-term sustainably through the engagement of Managed Care Organizations

c) Improvement in SDoH outcomes (1.5)

- 60-70% reduction in avoidable readmissions
- Intensive case management in palliative care by an assigned staff from palliative care team; avoided ED visits
- Developing a relationship between patients/providers and security

d) Qualitative Measures

Table 8: Qualitative Measures

Measure	Rating	Feedback	Score (6)
Integrated and patient centered care for palliative care patients.	★★★★☆	All members of palliative care team need to have a dialogue to identify patient priorities and how they can deliver the best care to the patient as possible. Adding (billable) case management as a component would help.	4

e) Opportunities for Improvement

Table 9: Opportunities for Improvement

Measure	Rating	Scope for Improvement	Score (6)
Communication between PCP's and palliative care patients	★★☆☆☆	There is room for improvement. Must have PCP and palliative care team collaborating at all phases of care and across the continuum of care. Goals of the patient are not yet being identified and recorded in a formal, standardized manner. Still common to have a "how are you feeling" conversation versus engaging in a more intimate conversation related to the patient's goals of care and advance directives.	2

III. Member Feedback from Patient Panel Survey

An online survey was administered to the Care Compass Network (CCN) panel members from Group 1: Medicaid or Uninsured and Group 4: Community Residents from **March 26, 2020 to April 20, 2020**.

- 25 questions
- **118 surveys (14% completion rate)**. Average completion time 4 minutes.
- **Community Residents had a 61%** [72 out of 118 for each] proportional response rate.
- **Medicaid or Uninsured had a 39%** [46 out of 118 for each] proportional response rate.

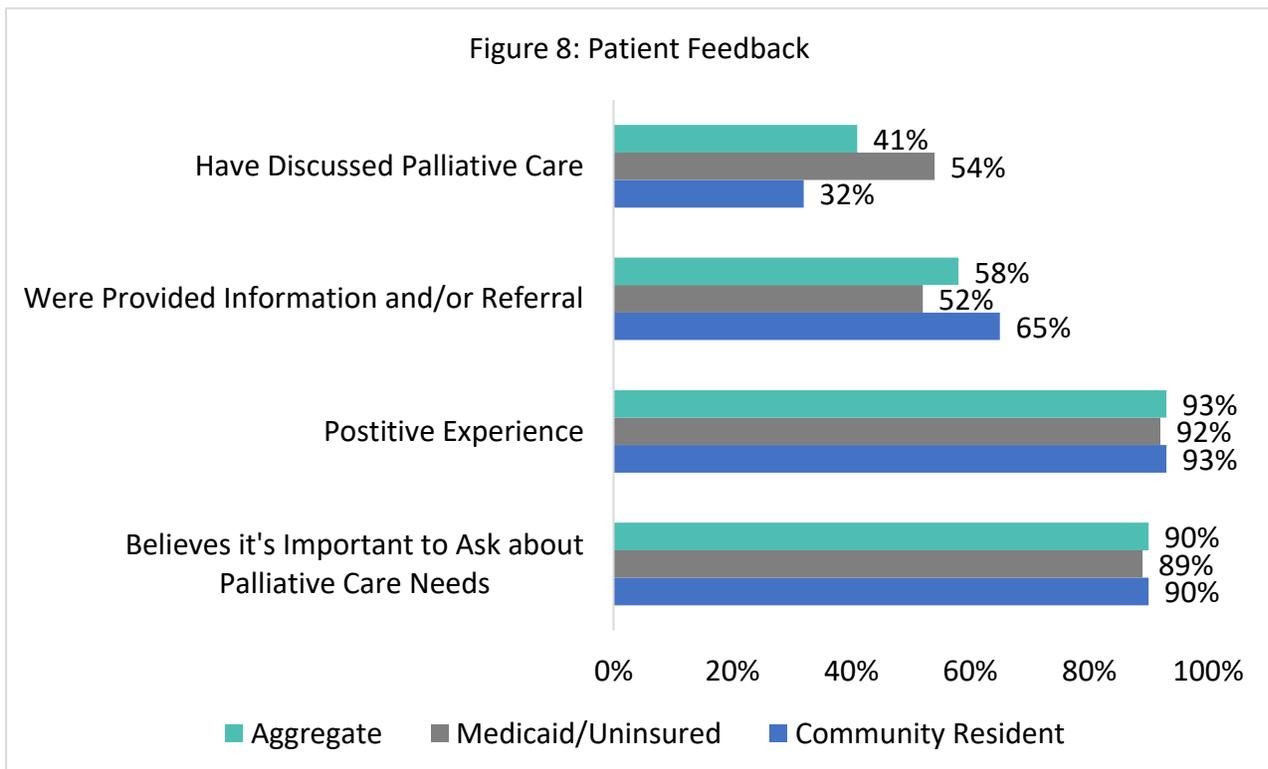


Figure 8: Member Feedback Survey

❖ Of respondents 41% [48 out of 118] have discussed an ongoing, serious health condition they have or have been dealing with through a family member with their primary care provider, looking for means to relieve symptoms, pain, and/or stress, also known as palliative care.

- 54% [25 out of 46] of **Medicaid and Uninsured respondents** and 32% [23 out of 72] of **Community Resident respondents** reported that they **had a discussion regarding palliative care for themselves or on behalf of a family member in the past year**.

❖ Of respondents who have a discussion related to palliative care in the past 12 months 58% [28 out of 48] recall their primary care provider providing them with information and/or a referral regarding support services and palliative care.

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- 52% [13 out of 25] of **Medicaid and Uninsured respondents** and 65% [15 out of 23] of **Community Resident respondents** reported that they **recall their primary care provider providing them with information and/or a referral regarding support services and palliative care.**

- ❖ Of respondents who recall being provided with information and/or a referral regarding support services and palliative care 93% [26 out of 28] would describe this experience as **positive**.
 - 92% [12 out of 13] of **Medicaid and Uninsured respondents** and 93% [14 out of 15] of **Community Resident respondents** reported this was a **positive** experience.

- ❖ Of respondents 90% [106 out of 118] believe having their primary care provider ask about support services such as palliative care is important.
 - 89% [41 out of 46] of **Medicaid and Uninsured respondents** and 90% [65 out of 72] of **Community Resident respondents** reported that they believe their primary care provider asking about support services such as palliative care is important.

Table 10: Scoring of Member Panel Feedback

Questions	Percentage	Score (15)
Was provided information/referral	58%	1
Had a positive experience during visit?	93%	5
Believes that its important to ask about palliative care needs.	90%	5
Total		11

Appendix

Detailed Scoring Matrix

Scoring Matrix		
Key Elements	Description	Points
Quantitative Analysis	Data from Projects and Salient	25 points
1. Regression Analysis	Statistical Association between Key activities undertaken during specific projects and HEDIS measures	15 points
a) Key HEDIS Measures	Statistical Association between 0 and 50%	8 points
b) Key HEDIS Measures	Statistical Association between 51% and 75%	12 points
c) Key HEDIS Measures	Statistical Association between 76% and 100%	15 points
d) Causal Effect	"Negative association of project activity with ER Visits (2 pts) Negative association of project activity with Hospitalizations (2 pts) Positive association between project activity and Primary Care (2pts)"	6 Points
e) Cost Effectiveness Analysis	Costs averted due to reduction in ED visits (1.3 pts) Costs averted due to reduction in Hospitalizations (1.3pts) Costs spent due to increase in PC Visits (1.3pts)	4 Points
Qualitative Analysis	Assessments conducted with various stakeholders involved in Speed and Scale Projects	75 Points
2. Project Specific Feedback from Partners	Interviews conducted by RMS with select partners for speed and scale projects	25 points
a) Patient Outcomes	Scale of 1 to 5 - 4 and above	5 points
	Scale of 1 to 5 - score of 3	3 points
	Scale of 1 to 5 - score of 2 or 1	1 point
b) Cost of Care	Scale of 1 to 5 - 4 and above	5 points
	Scale of 1 to 5 - score of 3	3 points
	Scale of 1 to 5 - score of 2 or 1	1 point
c) Lasting Partnerships	Scale of 1 to 5 - 4 and above	5 points
	Scale of 1 to 5 - score of 3	3 points
	Scale of 1 to 5 - score of 2 or 1	1 point
d) Workforce Development	Scale of 1 to 5 - 4 and above	5 points
	Scale of 1 to 5 - score of 3	3 points
	Scale of 1 to 5 - score of 2 or 1	1 point
e) System Transformation	Scale of 1 to 5 - 4 and above	5 points
	Scale of 1 to 5 - score of 3	3 points
	Scale of 1 to 5 - score of 2 or 1	1 point
3. Project Specific Feedback from Project Managers	Interviews conducted by Population Health Team with project managers for speed and scale projects	25 points
a) Milestones Ratings	Scale of 1 to 5 - 4 and above	10 points
	Scale of 1 to 5 - score of 3	7 points
	Scale of 1 to 5 - score of 2 or 1	2 point
b) Successes specific to Milestones	Qualitative statements	1.5 points

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c) Gaps specific to Milestones	Qualitative statements	None
d) Overall DSRIP Gaps in care going forward	Qualitative statements	None
e) Importance in improving SDoH outcomes	Qualitative statements	1.5 points
f) Qualitative Questions	Scale of 1 to 5 - 4 and above	6 points
	Scale of 1 to 5 - score of 3	4 points
	Scale of 1 to 5 - score of 2 or 1	2 point
g) Opportunities for Improvement	Scale of 1 to 5 - 4 and above	6 points
	Scale of 1 to 5 - score of 3	4 points
	Scale of 1 to 5 - score of 2 or 1	2 point
4. Member Panel Feedback from Patients	Survey conducted by RMS with Member Panel regarding Speed and Scale Project	15 points
a) Were asked about their health during visit	> 90% responded yes	5 points
	Between 75 to 89%	3 points
	Between 60 to 74%	1 point
b) Positive Experience	> 90% responded yes	5 points
	Between 75 to 89%	3 points
	Between 60 to 74%	1 point
c) Patient believes services provided were crucial for their well-being	> 90% responded yes	5 points
	Between 75 to 89%	3 points
	Between 60 to 74%	1 point
5. Regional Performing Units Feedback overall DSRIP activities	Survey conducted by Population Health Team during RPU Meetings in May	10 points
a) Workforce Development	Scale of 1 to 5 - 4 and above	5 points
	Scale of 1 to 5 - score of 3	3 points
	Scale of 1 to 5 - score of 2 or 1	1 point
b) System Transformation	Scale of 1 to 5 - 4 and above	5 points
	Scale of 1 to 5 - score of 3	3 points
	Scale of 1 to 5 - score of 2 or 1	1 point

Definitions – Statistical Associations

Direct NT: Direct Near Term - Project has a specific component (paid activity specifically) that affects the numerator of the measure in the near term (immediate impact; activity is incentivized).

Direct LT: Direct Long Term - Project has a component which encourages activities which affect the numerator of the measure. Activities may not have an immediate impact, but could encourage different future choices by members.

Mixed Direct: Project has a component which encourages activities which affect the numerator of the measure in general. Activity may not be paid; thus, although the project supports those activities, they are not specifically incentivized.

Quantitative Findings – Model Used

Regression Analysis Basics:

- The regression equation describes the relationship between the dependent variable (y) and the independent variable (x).

$$y = bx + a$$

Example: Anti-Dep Rx Fill = $b_1(3ai\ BH\ screen) + b_i(\text{Control vars}) + a$

- The intercept, or "a," is the value of y (dependent variable) if the value of x (independent variable) is zero, and is referred to as the 'constant.'
- The regression results report the coefficient b that represents how a unit increase in x affect the likelihood of y, holding all other factors constant
- P value is also reported in the regression results. It shows whether the coefficient has statistically significant impact on the dependent variable or not. If the p value is 0.05, we are 95% confident that the independent variable has some effect on the dependent variable.

Model Used

Logistic regression

- Assumption: dependent variable is dichotomous and binary; in other words, coded as 0 and +1.
- We use the logit model that displays the odds ratio obtained by running the regression.
- The odds ratio is a way of comparing whether the probability of a certain event is the same for two groups.
- An odds ratio of 1 implies that the event is equally likely in both groups. An odds ratio greater than one implies that the event is more likely in the first group. An odds ratio less than one implies that the event is less likely in the first group.