# Evidence Based Strategies for Disease Management in High-Risk/Affected Population (Adults only)

Project 3bi

March 29, 2021

CARE COMPASS NETWORK
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## Contents

**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, Schuyler, 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 Crisis Stabilization and coordination, housing, parenting and young children, etc. Through the course of the DSRIP program, CCN implemented eleven 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 the 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 Inc. (RMS) 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 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**

The goal of this project was to ensure clinical practices in the community and ambulatory care setting were using evidence-based strategies to improve management of cardiovascular disease. Project strategies focused on improving practitioner population management, adherence to evidence-based clinical treatment guidelines, and the adoption of activities to increase patient self-efficacy and confidence in self-management. Through participation in this project, CCN was able to incentivize partner organizations to implement these best practices. Towards that end, providers selected a panel of patients who met the cardiovascular disease criteria and were then tasked with meeting a standard of care to positively impact these patients. In addition, community-based organizations were trained to conduct Chronic Disease Self-Management Program (CDSMP) courses which instilled skills in the population of providers to increase patient engagement by empowering patients to set and maintain self- management goals.

**Evaluation Results**

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.

**a) Scoring Matrix**

| Table 1: Project Impact Scorecard | | |
|---|---|---|
| **Evaluation Elements** | **Possible Points** | **Points Received** |
| **View from the Front Line: Partners** | | |
| In Depth Interviews with Partners | 25 | 21.26 |
| RPU Meeting input and Survey | 10 | 5.78 |
| **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 | 17.92 |
| **Performance Metric Impact: Population Health** | | |
| Project Impact on Performance Metric Results | 15 | 15 |
| Causal Effect | 6 | 1.5 |
| Cost Effectiveness Analysis | 4 | 0 |
| **Overall (On 100)** | **100** | **72.46** |

Refer to the appendix for detailed scoring criteria[1]

The CCN Project Management Office provided valuable input and insight about each project's major achievements, obstacles, best practices, and overall value. Project Managers have a unique perspective as a result of their knowledge of DSRIP program objectives and requirements, regular tracking of project activities and services, relationships with participating organizations, and knowledge of how project activities have been rolled out or implemented across the PPS. Despite explicit criteria from the Department of Health for project requirements, there was relatively broad latitude in how the requirements could be implemented. A critical component of any evaluation are the insights of those who are most familiar with project management, provided that there is objectivity in the assessment

**b) Best Practices**

1. One of the major accomplishments of this program was CCN pursuing the Stanford Model of the CDSMP. Self-management, encouraged by either CDSMP efforts or Motivational Interviewing, shifts a prescriptive approach to more patient-centered care. The output element of this project encouraged an increase in this type of activity.
2. Fewer providers than initially anticipated participated in the project. Nonetheless, those that did achieved a standard of care for their cardiovascular disease patients. The workflow and guideline milestones in particular were challenging for even advanced organizations to achieve. It is likely that many of these types of standardizations would have occurred as a result of Patient Centered Medical Home (PCMH) certification efforts but this project ensured that cardiovascular disease patients especially benefited from this larger movement. That said, the lower provider engagement and the slow-to-stand-up nature of this project (with 20 milestones) prevented it from having a higher impact.
3. This project was one of the first to implement a panel report, one that intentionally takes a step away from fee-for-service (FFS) arrangements. The interim step towards value-based payment (VBP) structures was both necessary for the shift in healthcare payment occurring across the State as well as preparing organizations for similar reporting requirements in more advanced Care Compass Network programs such as the Cohort Management Program.
4. There was a concerted effort to partner providers with community agencies using CDSMP. There were definitely varying levels of success in terms of these partnerships, but it demonstrated to healthcare organizations that the community-based organizations had something unique, valuable, and relevant to contribute.

**c) Key Quotes**

As per the Project Manager at CCN, “Mapping this project to specific outcomes (and more specifically, a reduction in avoidable ER or inpatient use) was convoluted. I feel this led to the project becoming widely a lesser priority than others especially with larger health systems. CDSMPs limited participation also limited its impact. Originally, the vision was that patients would be getting both provider and community support in their self-management skills. Limited participation and also resistance to referring patients led to this two-pronged approach being more often the exception than the rule. As a result, very few Medicaid members benefited from CDSMP implementation.”

**Table 2: Total Project Engagement and Total CCN Spending**

CCN engaged 14 unique organizations, 5,885 unique members, provided 23,439 total services, and distributed $2.83 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.

| Unique Count of Organizations Engaged by | DY | | | | |
|---|---|---|---|---|---|
| Organization Type | DY2 | DY3 | DY4 | DY5 | Grand Total |
| Hospital System | 2 | 4 | 4 | 4 | 4 |
| Non-Hospital System | 2 | 6 | 10 | 6 | 10 |
| **Grand Total** | **4** | **10** | **14** | **10** | **14** |

| Volume of Services by | DY | | | | |
|---|---|---|---|---|---|
| Organization Type | DY2 | DY3 | DY4 | DY5 | Grand Total |
| **Hospital System** | | | | | |
| A - SM Goal Set or Reviewed | 537 | 1,110 | 1,695 | 1,345 | 4,687 |
| B - Provider Visit | | 1,096 | 4,044 | 3,597 | 8,737 |
| A - 1 CDSMP Session | | 7 | 1 | 2 | 10 |
| B - 2 CDSMP Sessions | | 7 | | 2 | 9 |
| C - 3 CDSMP Sessions | | 7 | | 2 | 9 |
| D - 4 CDSMP Sessions | | 7 | | 2 | 9 |
| E - 5 CDSMP Sessions | | 7 | | 2 | 9 |
| F - 6 CDSMP Sessions | | 7 | | 2 | 9 |
| **Non-Hospital System** | | | | | |
| A - SM Goal Set or Reviewed | 431 | 3,287 | 2,471 | 3,140 | 9,329 |
| B - Provider Visit | | | 341 | | 341 |
| A - 1 CDSMP Session | | 1 | 28 | 15 | 44 |
| B - 2 CDSMP Sessions | | 1 | 28 | 14 | 43 |
| C - 3 CDSMP Sessions | | 2 | 23 | 13 | 38 |
| D - 4 CDSMP Sessions | | 9 | 27 | 12 | 48 |
| E - 5 CDSMP Sessions | | 9 | 31 | 12 | 52 |
| F - 6 CDSMP Sessions | | 11 | 37 | 17 | 65 |
| **Grand Total** | **968** | **5,568** | **8,726** | **8,177** | **23,439** |

| Project > Payment Item | DY DY2 | DY3 | DY4 | DY5 | Grand Total |
|---|---|---|---|---|---|
| **3bi Cardiovascular Disease Management** | | | | | |
| Attend Master CDSMP Training (People) | $11,160 | | | | $11,160 |
| CDSMP - Coordination Services | | $20,160 | | | $20,160 |
| CDSMP - Graduation | | $2,550 | $3,150 | $1,500 | $7,200 |
| CDSMP - Master Trainer Training | | $6,240 | $10,400 | $0 | $16,640 |
| CDSMP - Peer Leader Instruction | | $10,400 | $2,080 | $4,160 | $16,640 |
| CDSMP - Peer Leader Training | | $23,660 | $7,280 | $1,820 | $32,760 |
| CDSMP - Session Attendance | | $7,360 | $10,000 | $4,720 | $22,080 |
| Collaboration Payment | | $0 | $13,599 | $6,013 | $19,612 |
| CV Protocol Training (by Site) | $5,000 | | | | $5,000 |
| CV Screenings (5 in total) | $2,980 | | | | $2,980 |
| Disruptive Payment | | $120,306 | | | $120,306 |
| Follow-Up Scheduled for Patients not Seen in 6 Months | $225 | | | | $225 |
| PCMH - EHR Demonstration | | $10,000 | $20,000 | $10,000 | $40,000 |
| PCMH - Guideline/WF Milestones | | $0 | $190,000 | $30,000 | $220,000 |
| PCMH - Panel Development | | $25,000 | $25,000 | $5,000 | $55,000 |
| PCMH - PMPM | | $529,125 | $754,590 | $684,870 | $1,968,585 |
| Peer Leader Training to Members | $100 | | | | $100 |
| Per Medicaid Member per Session of Training | $320 | | | | $320 |
| Prepayment | | $69,023 | | | $69,023 |
| Retro Disruptive Payment | | $5,695 | | | $5,695 |
| Sign-On Bonus | | $159,216 | $23,362 | $0 | $182,578 |
| Visits with documented SM goals reviewed and entered in EMR | $19,620 | | | | $19,620 |
| **Grand Total** | **$39,405** | **$988,735** | **$1,059,461** | **$748,083** | **$2,835,684** |

**Quantitative Findings**

**Section 1: Regression Analysis**

This section presents a quantitative regression analysis to establish a statistical relationship between the 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 Disease Management project, we considered the impact of the CDSMP sessions on the likelihood of monitoring cardiovascular disease (Lipid panel, etc.) among Medicaid Members. These measures are proxies for key DSRIP performance metrics, including Cardiovascular Monitoring for People with Cardiovascular Disease and Schizophrenia and Statin Therapy for Patients with Cardiovascular Disease. 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.

We used logistic regression models to statistically relate the performance metric proxy variables to the project activities. In this analysis, the data from July 2016 through June 2019 were pooled for cross-sectional analysis. We tested whether Medicaid members who received CDSMP sessions were more likely to also have Cardiovascular Monitoring and Statin Therapy. The logistic model yields an Odds Ratio, which is a measure of association between an "exposure" and an "outcome". In this analysis, we consider receiving a CDSMP session and reviewing self-management goals service under the DSRIP project to be the "exposure", while having Cardiovascular Disease Monitoring and receiving Statin Therapy serves as the "outcome"[1].

The following table presents the results from the statistical regression analysis. Each row represents a regression model, with the performance metric proxy as the dependent (outcome) variable and an indicator variable for having received a 3bi Services as the independent (exposure) variable. Regression modeling yields the Odds Ratio, as explained above. An Odds Ratio[2] greater than one indicates that having received at least one CDSMP session is positively associated with the outcome variable. In our analysis, we find positive associations.

**Table 3: Regression Analysis**

| HEDIS Measures | Odds Ratio | Interpretation | Score (15) |
|---|---|---|---|
| **Cardiovascular Monitoring** | 5.19*** | Providing a CDSMP session or reviewing self-management goals with Medicaid patients is associated with an odd of 5.19 greater likelihood of monitoring cardiovascular disease (Lipid panel, etc.) among Medicaid Members. | **15** |

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

[2] Refer to the appendix for details on regression analysis, model used and interpreting odds ratio

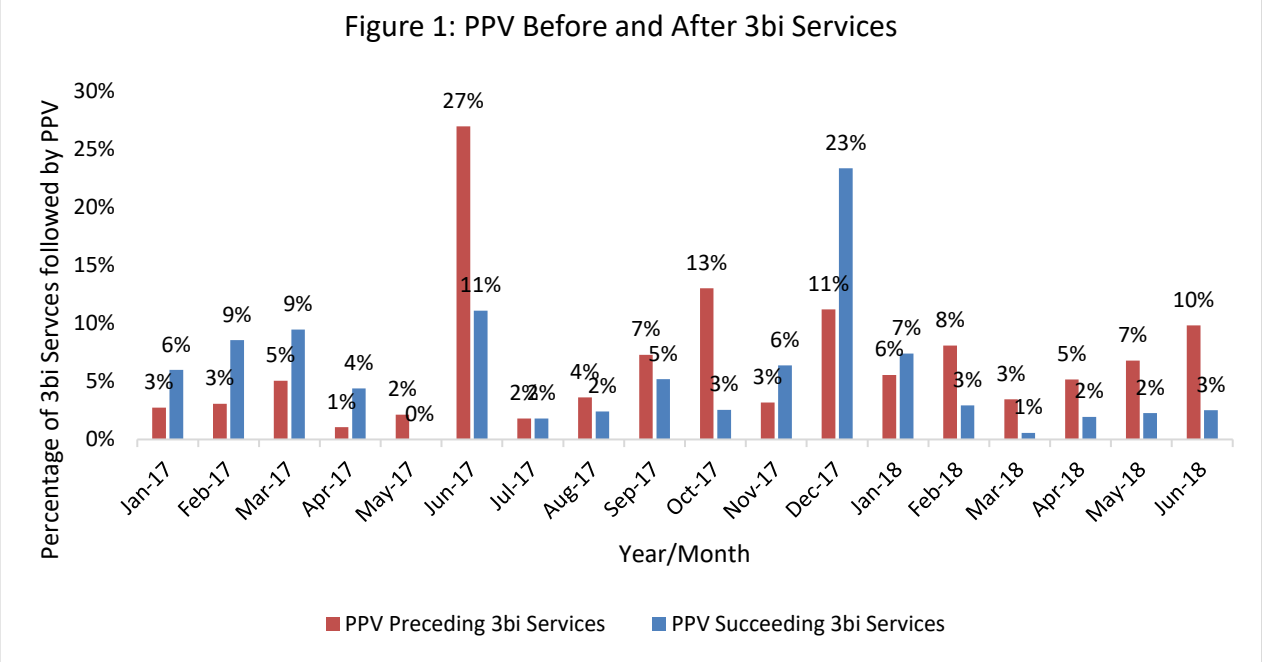
| | | | |
|---|---|---|---|
| **Statin Therapy for Patients with Cardiovascular Disease** | 4.24*** | Providing a CDSMP session or reviewing self-management goals with Medicaid patients is associated with an odd of 4.24 greater likelihood of receiving and adhering for Statin Therapy among patients with cardiovascular disease among Medicaid Members. | **15** |
| **Average** | | | **15** |

**Section 2: Causal Effect Graphs**

The cross-sectional analysis in the previous section did not reveal the desired negative association between 3bi Services and potentially preventable ED visits or inpatient hospitalizations. It is possible, however, that 3bi Services is an effective way to divert Medicaid members to alternate, more appropriate care settings but the effect is not strong enough to be revealed in a cross-sectional analysis. In this section, we look at the trends in PPVs and inpatient admissions occurring after a 3bi Services to discern any utilization patterns that suggest an ability of 3bi Services to reduce reliance on these types of care settings. For 3bi Services to have a probable causal impact on PPVs and inpatient care, we would expect the proportion of those who received 3bi services and had PPVs or inpatient admissions in the year after being 3bi Services to fall over time. We also present similar graphs of primary care utilization following a 3bi Services; in order to establish a potentially causal relationship, we expect the proportion of those who received 3bi services and have a primary care visit in the year following to rise over time.

**Potentially Preventable ED Visits**

In Figure 1, we present monthly proportions of attributed 3bi services that had a PPV in the year following their services. In total, there were 6805 3bi services offered between January 2017 and June 2018. Cumulatively, 335 (5%) 3bi services were preceded by PPVs within a year before and 407(6%) 3bi Services were followed by a PPV in the year following their 3bi Services; PPVs had to occur within 365 days before or after receiving the services. The proportion varies month to month, with some outliers. The trend is not stable and varies over time. The rate differentials in most months and differing trend lines suggest that 3bi services may have impacted potentially unnecessary or avoidable use of the Emergency Room during certain months. These differences are not regression adjusted to control for factors which may affect the PPV rate other than the project services. The rates and trends are also not statistically different.

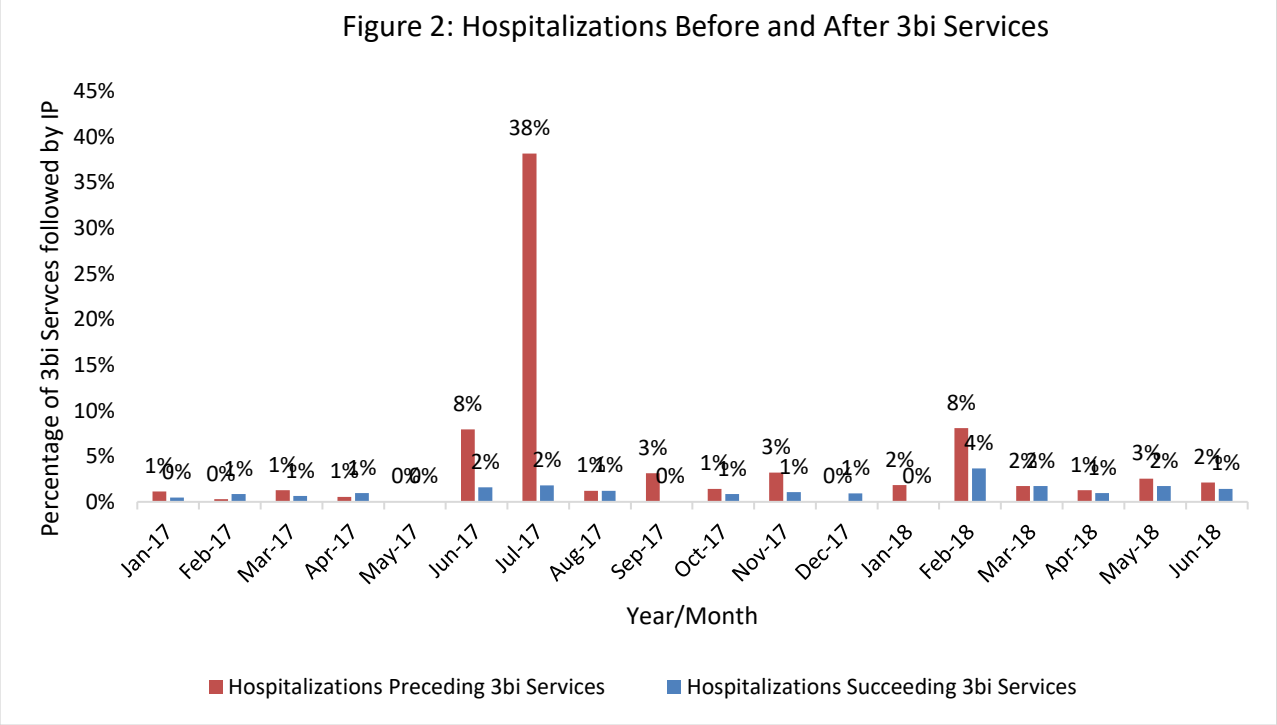



Note: Figure 1 depicts the percentages of CCN Attributed 3bi Services preceded and succeeded by one or more PPVs within a year of the 3bi Service, by month of 3bi Service.

This graph indicates that PPVs are relatively likely to occur after receiving 3bi services, the trend is unstable and varies over time. A declining trend is seen starting January 2018. In certain months, there is a sudden spike in December 2017 to 23%

**Hospitalizations**

In Figure 2, we present a similar graph, now considering inpatient admissions which occurred within a year of a 3bi Services. In total, there were 6805 3bi services offered between January 2017 and June 2018. Cumulatively, there were 129(1.9%) 3bi services preceding hospitalizations in the year before and 74 (1.1%) 3bi services that were followed by hospitalizations in the year following 3bi Services. Month to month, the proportion of people admitted varies between 0% and 2%. The trend is unstable and varies over time. However, the rate differentials before and after 3bi services suggest that the project is successful in keeping the hospitalizations low after the services were provided. These differences are not regression adjusted to control for factors which may affect the hospitalizations rate other than the project services. The rates and trends are also not statistically different.




Note: Figure 2 depicts the percentages of CCN Attributed Medicaid members who received 3bi services and had one or more hospitalizations within a year of 3bi services, by month of 3bi services. For example, 2% of those who received in August 2016 had a hospitalization in the following year.

The effect of 3bi Services is not strong enough to see in causal graphs of PPVs or Hospitalizations (which is understandable); the trend analysis suggests the desired impact for periods of time but not necessarily across the board. We assigned one out of four possible points to the causal effect item on the Project Score Card to reflect these results.

**Table 4: Causal Effect Score Card**

| | **Score Card (6)** |
|---|---|
| **Potentially Preventable ED Visits** | 0 |
| **Inpatient Hospitalizations** | 1 |
| **Primary Care Engagement** | NA |
| **Total Points Assigned to Score Card** | **1.5(Pro-Rated)** |

**Section 3: 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 charges).[3,4,5] Desired result for 3bi project is that COPD services are associated with a reduction in the use of hospital Emergency Departments, a reduction in hospital admissions, and an increase in primary care engagement. 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 3bi 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. Net savings is not observed for 3bi project since none of the mean estimates of avoided utilization before and after project activity is statistically significant.

**Table 5: Avoided Utilization and Net Savings Associated with 3bi Project (July 2017-June 2018)**

| | 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 $ |
|---|---|---|---|---|---|---|---|
| **3bi services** | 136 | -44 | -204 | $0 | $767,740 | $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

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

[4]2018 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

[5]Health 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

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.

| Table 6: Cost Effectiveness Score Card Points | |
|---|---|
| | **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** | |

To conclude the quantitative analysis, evidence suggests promising results in the areas of increased primary care engagement as well as reduced emergency room visits and hospitalizations in certain months.

## Qualitative Findings

### I. Project Specific Feedback from Partners

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

**Setup and History**: Our partners aligned with the CVD project help patients get involved with community health education programs. They are also delivering Chronic Disease Self-Management Program (CDSMP) wherein they partner with other organizations to get people into an evidence-based program. One of the combined outcomes of CDHMP is that patients are better able to manage their chronic health condition, thereby reducing unnecessary ED visits, hospital admissions, etc. They are managing their long-term health condition better on their own and being a self-advocate of their own health care team.

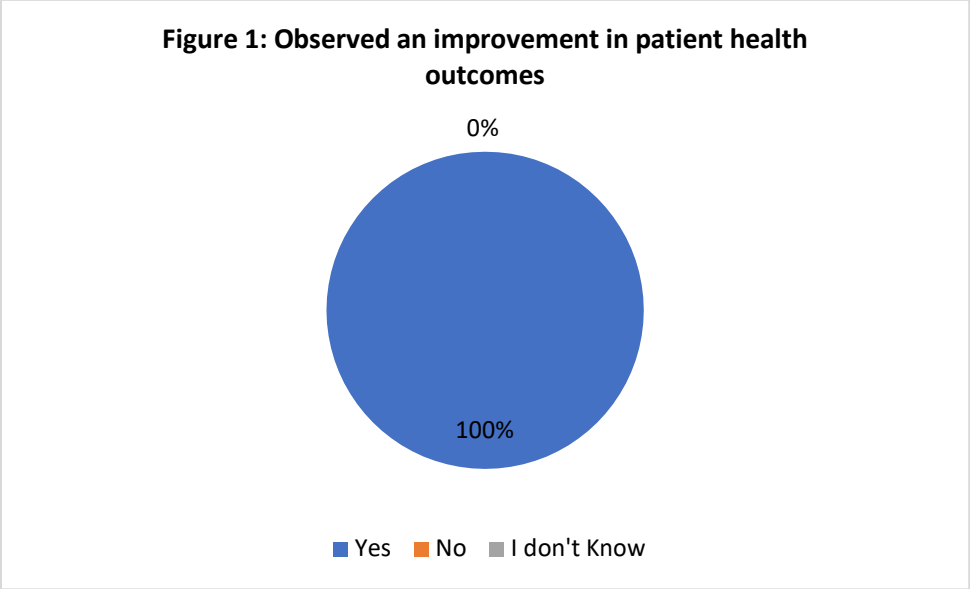
### a) Patient Outcomes

**Table 1: Patient Outcomes**

| Interview Question | Rating | Feedback | Score (5) |
|---|---|---|---|
| Extent project has made a positive impact on patients/clients | ★★★★½ | Anecdotal evidence from people that participate in workshops develop learning skills and tools to be better health managers of their own health. However, there is no mechanism in place to follow up with the patients and find out the true long-term impact. Besides, some of the elements of this project, gave our partners the ability to transform care for specific patient population that impact ambulatory visits. Specifically, around smoking cessation, they were able to develop new screens and facilitate how the provider can provide counseling and document smoking. | 5 |
| Extent project activities make a positive long-term impact on patients/clients | ★★★★½ | Early adoption of a population health approach helped. We started working on a panel and looking at that group holistically. It has given us the ability to look at those patients a little differently and we have applied that with our admissions. | 5 |
| Average | | | 5 |

**Figure 1: Observed an improvement in patient health Outcomes**

100% of respondents said they observed an improvement in patient outcomes. One of the partners stated that the true benefits of programs like this is that it brings people together that have something in common, whether it is a common health concern or other SDoH needs, during the 6-week CDHMP workshop.

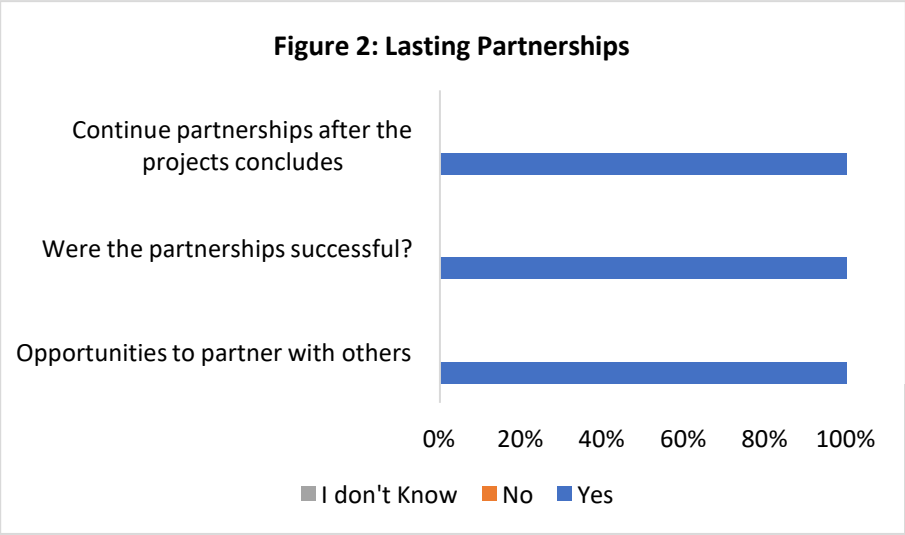



### b) Cost of Care

| Table 2: Cost of Care | | | |
|---|---|---|---|
| **Interview Question** | **Rating** | **Feedback** | **Score (5)** |
| Extent project activities reduction in cost of care long term | ★★★☆☆ | 5 years was enough time to truly make this transition. Besides, the reimbursement is very low and tend to be for the sickest. Until we are at a point where people are coming in for wellness, not for multiple co-morbidities, it's going to be really hard to impact cost. The Medicaid population tends to be sicker than the population holistically. | 3 |

### c) Figure 2: Lasting Partnerships

100% of the respondents said that project 3bi provided them with opportunities to partner with others, these partnerships weren't successful and they would continue these partnerships after the project concludes. They stated that they have gone for grants outside of DSRIP. Even without the prospect of DSRIP 2.0 money, they are still communicating and reaching out to each other and trying to figure out ways they can partner. *"We are stronger a team then we are individually".*




| Table 3: Lasting Partnerships | | | |
|---|---|---|---|
| **Interview Question** | **Rating** | **Feedback** | **Score** |
| Extent the project activities have improved coordination of patient care | ★★★★☆ | Our partners prefer closed loop referral and if they are able to provide a warm hand-off for overall benefit of their patients, they work on that. It gave them the ability to make technology improvements. They look at the patient more holistically. | 5 |

### d) Workforce Development

When asked about how many positions were involved in this project. One partner said 10 to 12 positions and the project consumes minimal of their time. Another said about 300 positions and the project consumes half of their time. 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”

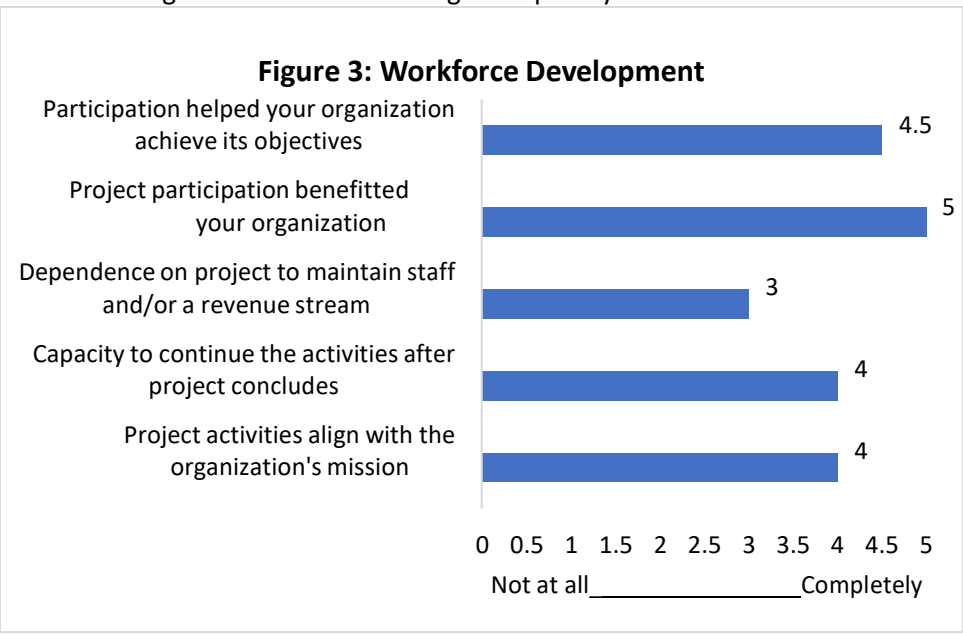


**Figure 3: Workforce Development**

When asked about whether the extent to which project activities align with the organizations mission and if they have the capacity to continue activities after the project concludes, respondents gave it a rating of 4. One of the partners noted that that they are looking for resources and a sustainability plan when DSRIP funding ends. 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 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 4.5.

**Organization is Looking for Future Source of Funding**

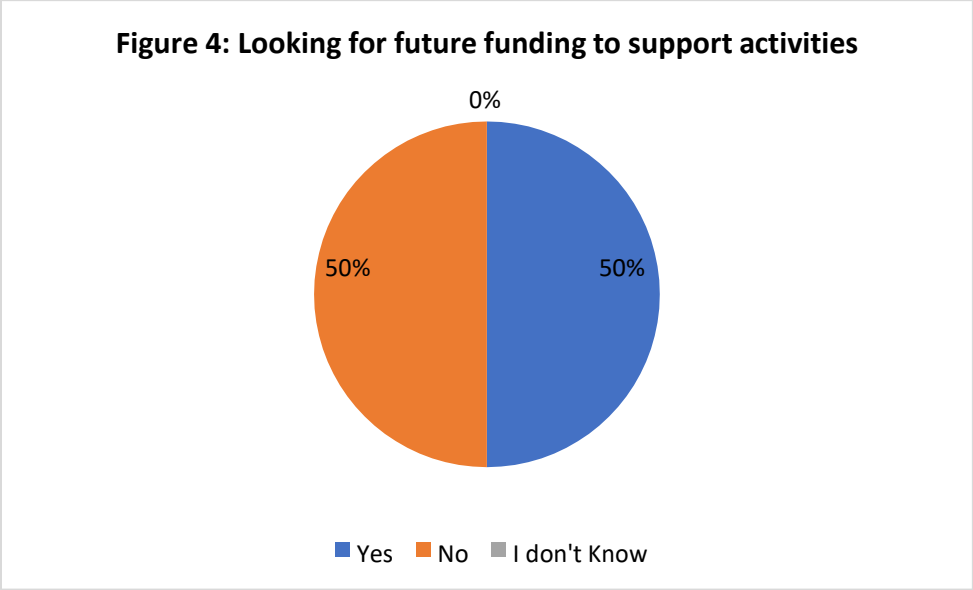



**Figure 4: Looking for future funding to support activities**

When asked about whether the partners engaged with 3bi are looking for future sources of funding, 50% of the respondents said yes and 50% said no. As a follow up question, when asked if their staff will be downsized or redeployed if the project is discontinued, 50% respondents said they will redeploy and another 50% said they don't know. DSRIP project currently contributes up to 20% of the organization's revenue stream.

**Figure 5: New skills/competencies derived from project participation**

**Figure 5: New skills/competencies derived from project participation**

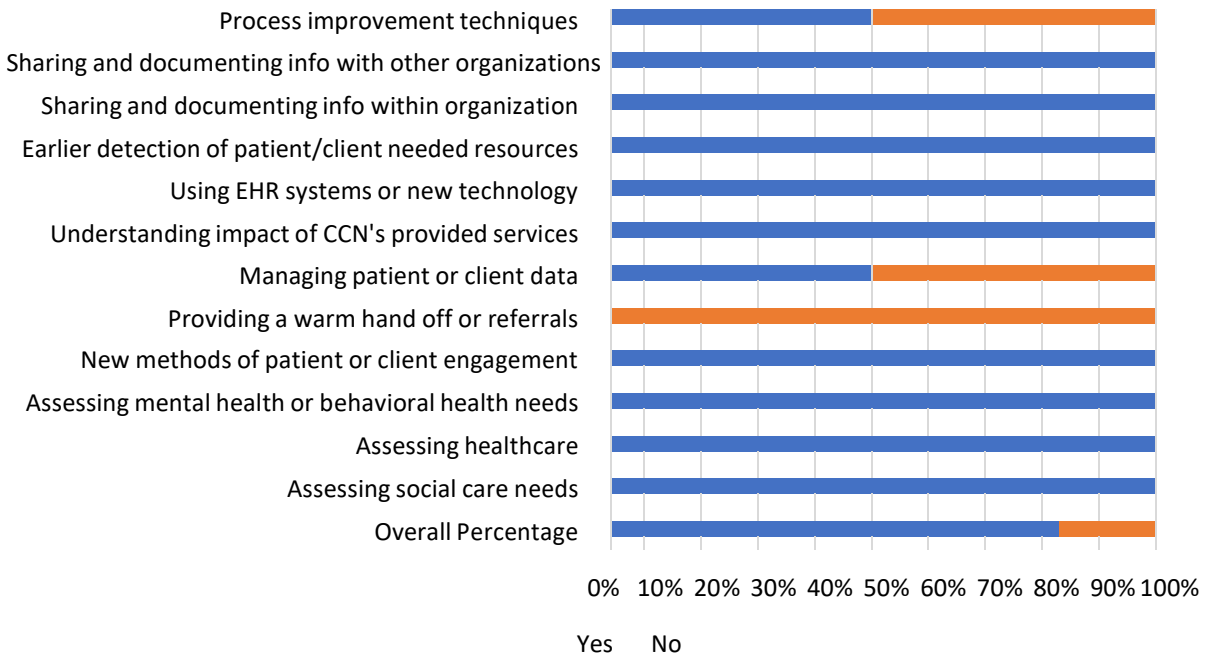



**Figure 5:** Partners gained 83% of new competencies and skills as a result of this DSRIP Project. However, 17% said they didn't benefit, in particular, the only skill that 100% of the respondents said they need to develop is providing warm hand-offs or referrals.

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

a. Assessing social care needs
b. Assessing healthcare
c. Assessing mental health or behavioral health needs
d. New methods of patient or client engagement
e. Assessing and understanding impact of our organization's provided services
f. Earlier detection of patient/client needed resources
g. Sharing and documenting info within organization
h. Sharing and documenting info with other organizations

**Figure 6: Extent to which participation benefitted our partner organizations**

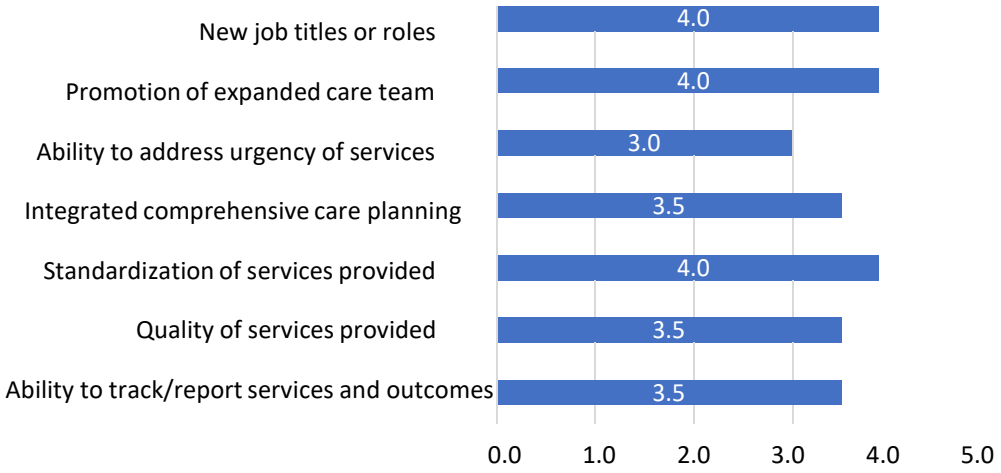



**Figure 6:** When asked to what extent participation in the project benefitted our partner organizations, the overall ranking ranged between 3 and 5 on a scale of 1 to 5 where 1 being "Not at all" and 5 being "Significant". In terms of ability to track and report on services/outcomes and quality of services provided, respondents rated it a 3.5 out of 5. Regarding the standardization of services provided, partners ranked it at 4. Integrated comprehensive care planning is rated 3.5. Ability to address urgency of services is ranked at 3. In terms of promotion of expanded care team and creating new job titles/roles, it is ranked 4 by our partners.

**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 | ★★★★☆ | 5 |
| Project participation benefited your organization | ★★★★★ | 5 |
| Participation helped your organization achieve its objectives | ★★★★½ | 5 |
| Ability to track/report services and outcomes | ★★★½☆ | 3.5 |
| Quality of services provided | ★★★½☆ | 3.5 |
| Standardization of services provided | ★★★★☆ | 5 |
| Integrated comprehensive care planning | ★★★½☆ | 3.5 |
| Ability to address urgency of services | ★★★☆☆ | 3 |
| Promotion of expanded care team | ★★★★☆ | 5 |
| New job titles or roles | ★★★★☆ | 5 |
| Average | | 4.40 |

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

**Table 5: Workforce Development**

| Questions | Rating | Score (5) |
|---|---|---|
| a. This DSRIP project has helped your organization prepare in performance-based contracts with payers. | ★★★★½ | 5 |
| b. This DSRIP project has helped your organization promote or develop our services. | ★★★½☆ | 3.5 |
| 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. | ★★★☆☆ | 3 |
| 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. | ★★★★½ | 5 |
| g. This DSRIP project has given your organization a platform to share best practices. | ★★★★★ | 5 |
| Average | | 4.5 |

### e) System Transformation

To assess system transformation, we asked the partners a series of questions. Their rated response to those questions is highlighted in the table below. Rating of 1 is "Not at all" and rating of 5 is "Completely". The respondents could reply "Don't know".

**Table 6: System Transformation**

| Questions | Rating | Feedback | Score (5) |
|---|---|---|---|
| a. Better integration of services across settings or organizations | ★★★★½ | This project provided a platform to start initiating population health activities and it integrated all the parties who holistically care for the patient. | 5 |
| b. Ability to share data in real time to improve patient or client care | ★★★★☆ | This project raised awareness among our partners to learn what data they can share with their partner organizations. It expanded access to their EMR data. | 5 |
| c. Promotion of community-based services (over institutional care) | ★★★½☆ | Clinical needs are only a small factor in terms of a person's health outcomes. Clinical providers are finally hearing that, however, community-based care is still a missing component. | 3.5 |
| d. Promotion of team-based care (more coordinated care; cross-organizational teams) | ★★★☆☆ | Same as d. | 3 |
| e. More efficient services that reduce waste in the system | ★★★★☆ | The systems and processes are in place, however, they are not being used efficiently. | 5 |
| f. Implementation of self-management goals | ★★★☆☆ | Community at large have to understand the importance of addressing the social determinants of health. Patient's understand their own role and are able to advocate for their own health. However, it's a difficult message to send to the community at large. | 3 |

| | | | |
|---|---|---|---|
| g. Shift in staff mindset in addressing patient needs | ★★★★½ | At the leadership level that is happening more so than at the boots on the ground level (client or patient facing), because it's a challenge. With more partnerships comes more accountability, comes more reporting, comes more paperwork. | 5 |
| h. New billable service development | ★★☆☆☆ | The whole purpose of Medicaid redesign was to get everybody ready to have mechanisms for billing. 5 years was enough time for that. *"We are not ready for VBP and neither are our partners in community-based settings."* | 1 |
| Average | | | 3.81 |

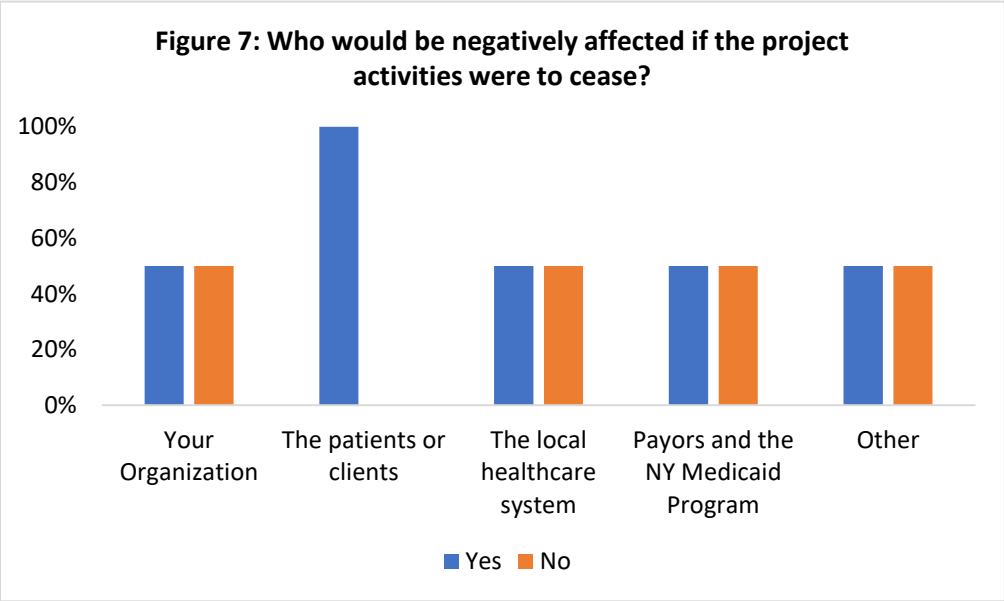



**Figure 7: Who would be negatively affected if the project activities were to cease?**

When asked who would be negatively affected if the DSRIP project was to cease –50% of the respondents stated their organization, the local healthcare system, payors and NY Medicaid program, and among others CBO's would be impacted. 100% of the respondents said that their patients would be impacted.

## II. Project Specific Feedback from Project Managers

### a) Milestone Rating and Feedback

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

**Table 7: Milestone Ratings**

| Milestone | Rating | Success Factors | Gaps | Score (10) |
|---|---|---|---|---|
| Implement program to improve management of cardiovascular disease using evidence-based strategies in the ambulatory and community care setting | ★★★☆☆ | Moving the narrative away from prescriptive goals towards self-management where patients set goals realistic goals for themselves that they could then take initiative towards. | There were so many milestones of this project, hard to achieve them all. Not all CCN partners have a cardiovascular program to participate with. There were also, some communication and engagement issues with partners. | 7 |
| Connect PPS Safety-Net providers to HER system with local health information exchange capabilities. | ★★★★☆ | Successful RHIO connection. | Timing was an issue; failed timing across all related prospects. Passing/failing can also be attributed to DOH requirements which quite technical. | 10 |
| Adopt and follow standardized treatment protocols for hypertension and elevated cholesterol. | ★★★★☆ | Success factors include patient identification and PCMH certification requirements to establish standardized treatment protocols. | Timing: at the time of reporting the milestone, there were only 2/3 major health systems that had a guideline in place. Adopting and following standardized treatment protocols was also a challenge. | 10 |
| Ensure staff involved in measuring and recording blood pressure are using correct measurement techniques and equipment. | ★★☆☆☆ | Smaller organizations were more likely to incorporate new training and we saw evidence that this change did happen, potentially on a larger scale. | Getting partners to train their organizations is very challenging; especially in larger systems. Getting all the organization to report is also very challenging. | 2 |
| Identify patients with repeated elevated blood pressure readings but do not have a diagnosis of hypertension and schedule them for a visit. | ★★★★☆ | Connection to the RHIO contributed to the success. | There was a gap in the follow through with schedule. RHIO training and individuals using technology they were not familiar with also created challenges. | 10 |
| Document patient driven self-management goals | ★★★★☆ | Speed and scale of this project was effective and the consistent participation. | Lower engagement as well as partners not signing contracts/completing the | 10 |

| | | | | |
|---|---|---|---|---|
| in the medical record and review with patients at each visit. | | | reports all posed as barriers to success. | |
| Adopt strategies from the Million Lives Campaign. | ★★☆☆☆ | Borrowed concepts/content from the campaign where relevant. | Some programs in the Million Lives campaign were already outdated. | 2 |
| Engage a majority (at least 80%) of primary care providers in this project. | ★☆☆☆☆ | Not successful with this milestone. | Low engagement; difficult to keep everyone onboard with a 20-milestone project. Slower ramp up of this project over the course of DSRIP. | 2 |
| **Average** | | | | **6.62** |

**b) DSRIP Gaps in Care to Address Going Forward**

Consistency and standardization of care across the region for patients with cardiovascular disease remains an ongoing need post DSRIP. There is also ongoing opportunity to improve consistency in workflow guidelines to increase success.

**c) Project Impact on SDOH or Clinical Outcomes (1.5)**

PMO identified 3bi as a medium-impact project noting that fewer providers participated in the project than initially anticipated and what was needed to achieve full potential. Conceptually, the project has the potential to make a positive impact on High Blood Pressure and Statin Therapy. PMO also noted that this project lacked a clear relationship to the overall DSRIP vision. Nevertheless, the project is important to improving quality of care at physician sites and is an important intervention for the target population as found in the needs' assessment.

**d) Opportunities for Improvement**

**Table 8: Opportunities for Improvement**

| Measure | Rating | Scope for Improvement | Score (6) |
|---|---|---|---|
| How effective is the communication between physicians and patients on self-management goals? | ★★★☆☆ | • Partner organizations who used non-physician staff were most successful in this aspect<br>• Variability in how often and to what extent providers check up on their patient's goals<br>• Unless you are going to a follow-up appointment with your provider, you may not be checked up on | 4 |

## III. Member Feedback from Patient Panel Survey

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.

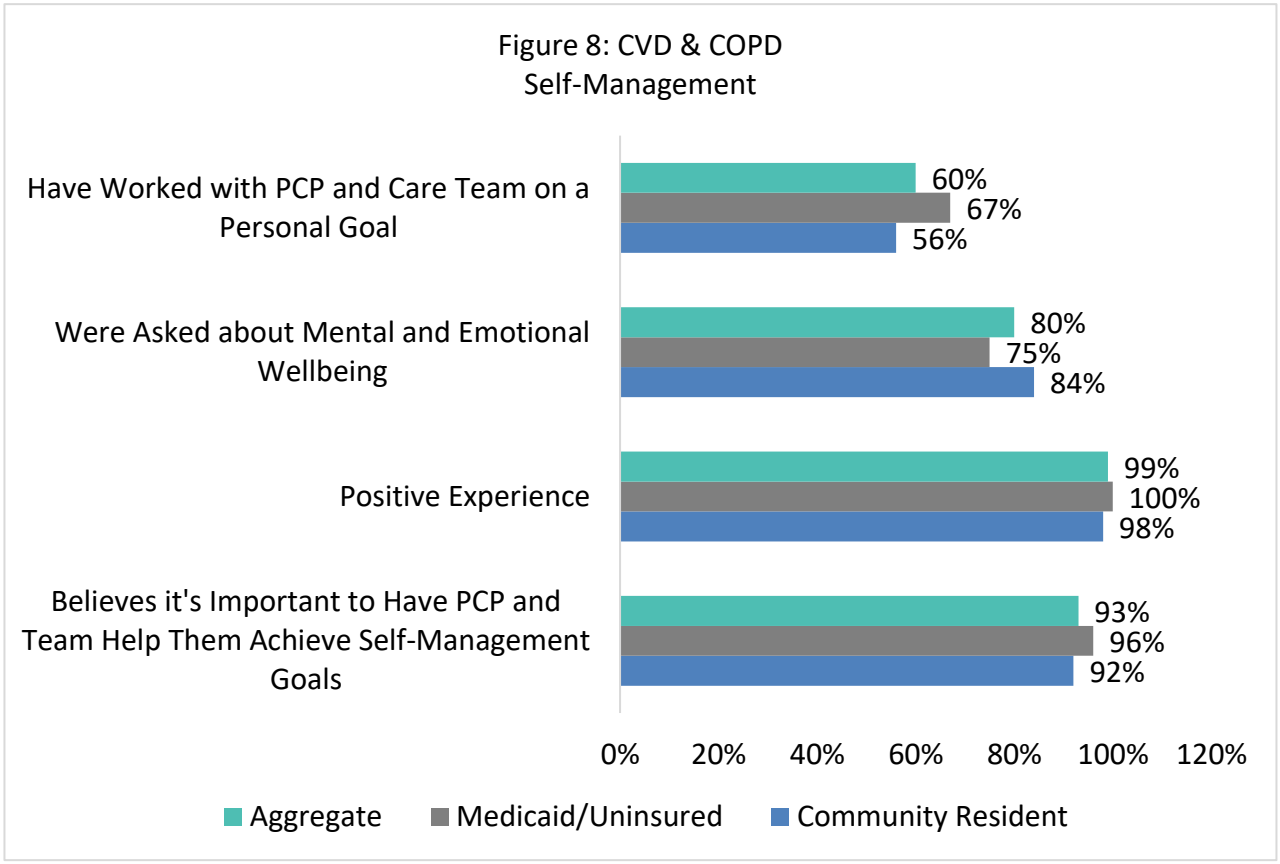



**Figure 8: CVD & COPD Self-Management**

Of respondents 60% [71 out of 118] have worked with their primary care provider and care team on a personal goal to improve their overall health.

- 67% [31 out of 46] of **Medicaid and Uninsured respondents** reported that they **have worked with their primary care provider and care team on a personal goal to improve their overall health**.
- 56% [40 out of 72] of **Community Resident respondents** reported that they **have worked with their primary care provider and care team on a personal goal to improve their overall health**.

Of respondents who recall have worked with their primary care provider and care team on a personal goal to improve their overall health 99% [70 out of 71] would describe this experience as **positive**.

- 100% [31 out of 31] of **Medicaid and Uninsured respondents** and 98% [39 out of 40] of **Community Resident respondents** reported this was a **positive** experience**.**

Of respondents 93% [110 out of 118] believe having their primary care provider and their staff help them achieve self-management goals such as exercising, quitting smoking, losing weight, etc. is important.

- 96% [44 out of 46] of **Medicaid and Uninsured respondents** and 92% [66 out of 72] of **Community Resident respondents** reported that they believe their primary care provider and their staff help them achieve self-management goals such as exercising, quitting smoking, losing weight, etc. is important.

**Scoring of Member Panel Survey**

**Table : Scoring of Member Panel Feedback**

| Questions | Percentage | Score (15) |
|---|---|---|
| Have worked with a PCP or care team on a personal goal? | 60% | 1 |
| Had a positive experience during visit? | 99% | 5 |
| Believes that its important to have PCP and team help them achieve self-management goals. | 93% | 5 |
| Total | | 11 |

## IV. Regional Performing Unit Feedback

During the month of May we collected survey responses from all participants at RPU Meetings on two topics: Workforce development and System Transformation. The survey was rating based from 1 to 5 with 1 being "Minimal" and 5 being "Significant". We received 38 responses in total. The table below highlights the distribution of responses across the RPUs. Approximately 2.63% (1 response out of 38) of the responses was for project 3bi.

| **Table 10: RPU Responses** | | | 3bi |
|---|---|---|---|
| South | 47.37% | 18 | 0 |
| North | 34.21% | 13 | 0 |
| West | 10.53% | 4 | 1 |
| East | 7.89% | 3 | 0 |
| Total | 100.00% | 38 | 1 |

**Table 11: Scoring of Workforce Development Questions**

| Questions | Rating | Score(5) |
|---|---|---|
| Ability to track/report services and outcomes | ★☆☆☆☆ | 1 |
| Quality of services provided | ★★☆☆☆ | 1 |
| Standardization of services provided | ★★☆☆☆ | 1 |
| Integrated comprehensive care planning | ★★☆☆☆ | 1 |
| Ability to address urgency of services | ★★☆☆☆ | 1 |
| Promotion of expanded care team | ★★☆☆☆ | 1 |
| New job titles or roles | ★★★★☆ | 5 |
| **Average** | | **1.57** |

**Table 12: Workforce Development**

| Questions | Rating | Score (5) |
|---|---|---|
| a. This DSRIP project has helped your organization prepare in performance-based contracts with payers. | ★★★☆☆ | 3 |
| b. This DSRIP project has helped your organization promote or develop our services. | ★★★☆☆ | 3 |
| 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. | ★★★☆☆ | 3 |
| e. This DSRIP project supported your organization to undertake activities that we see value in. | ★★★★☆ | 5 |
| f. This DSRIP project has given your organization a platform to share best practices. | ★★★★★ | 5 |
| **Average** | | **4** |

**Table 13: System Transformation**

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

| Questions | Rating | Score (5) |
|---|---|---|
| a. Better integration of services across settings or organizations |  | 5 |
| b. Ability to share data in real time to improve patient or client care |  | 1 |
| c. Promotion of community-based services (over institutional care) |  | 5 |
| d. Promotion of team-based care (more coordinated care; cross-organizational teams) |  | 5 |
| e. More efficient services that reduce waste in the system |  | 1 |
| f. Shift in staff mindset in addressing patient needs |  | 3 |
| g. New billable service development |  | 1 |
| **Average** | | **3** |

**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)<br>Negative association of project activity with Hospitalizations (2 pts)<br>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)<br>Costs averted due to reduction in Hospitalizations (1.3pts)<br>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** |

| | | |
|---|---|---|
| **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 |

**b) 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.

**c) 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) +$b_i$(Control $vars_i$)+ 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.