Statewide Annual Report

by the Independent Evaluator for the NEW YORK STATE Delivery System Reform Incentive Payment (DSRIP) Program

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Section I

Executive Summary

This is the first annual statewide report for the Delivery System Reform Incentive Payment (DSRIP) program Independent Evaluator. The Independent Evaluator team is represented by the State University of New York Research Foundation (SUNY RF), and composed of investigators from the University at Albany, State University of New York, Boston University School of Public Health, and the University of Maryland School of Public Health. For this evaluation, the SUNY RF submitted a competitive bid to the New York State Department of Health (NYS DOH), and was awarded a contract that began in the last quarter of 2016. This report covers activities conducted, begun and/or completed between the period of late 2016 through early 2018.

The Independent Evaluator is using a mixed methods strategy to address the project's research questions. This strategy offsets the weaknesses inherent in single method approaches and allows the Independent Evaluator to confirm, cross-validate, and corroborate findings (Creswell et al., 2003; Teddlie & Yu, 2007). Three research teams make up the Independent Evaluator integrated team to support the methodological approach of a sound DSRIP program evaluation plan. The three research teams are the Implementation and Process Study team, the Time Series Analysis team and the Comparative Analysis team. This evaluation is a requirement of the Centers for Medicare and Medicaid Services' (CMS) Special Terms and Conditions (STC) that were agreed to with the NYS DOH. The STC, Sections VIII.21 through VIII.33, posted in the DSRIP website (https://www.health.ny.gov/health_care/medicaid/redesign/docs/special_terms_and_conditions.pdf) contain more details about the Independent Evaluation requirement.

This first annual report includes a summary of the literature and a summary of activities of all three research teams of the evaluation project, as well as main findings of the work in the NYS DSRIP Evaluation Plan. For the Implementation and Process Study team, primary data from the field were obtained and findings from the first year of qualitative and quantitative work of this arm are summarized in this document. For the Time Series Analysis and Comparative Analysis research teams, there were delays in 2017 in acquiring the necessary administrative data for the empirical work to be performed. However, work proceeded and models for the analyses in these two research teams were developed and comprehensive literature reviews were completed. Findings of the Time Series Analysis and Comparative Analysis based on administrative data will be included in future annual reports. In addition to the main findings of each team of the evaluation, studies planned for the upcoming evaluation year are also described in this report.

For the Implementation and Process Study, there are the following limitations to the analysis and findings:

- Key informant interviews were conducted in a small group via telephone. There is potential that interviewees moderated their contributions to the discussion based on the leadership present.
- While many of the Performing Provider Systems (PPS) had members of the original team present for the interview, there were a number of entities where there had been full turnover, and no respondent was able to accurately provide historical data on start-up related questions.
- For the focus groups, only six were conducted in two regions of NYS. This limits the categorical-based DSRIPengaged partners' findings and applicability that the Implementation and Process Study team can present at
 this time. Future analyses will present focus group findings from four categories of partners in additional regions
 of NYS to discern partner category-specific experiences with the DSRIP program.
- While qualitative conclusions are supported by stakeholder quotes, there is a likelihood that some experiences in the DSRIP program will not be represented by the findings. Future research collection years will attempt to correct for this.
- The perspectives of patient care within the DSRIP program design may not yet be fully informed. The Implementation and Process team is evaluating the possibility to host future data collection activities with patients through focus groups.
- As data were retrospectively focused on DSRIP Demonstration Years 0-2, there is a possibility that some information was not recalled correctly.

Section II

Overview of Key Findings, Future Plans, and Conclusions

KEY FINDINGS

IMPLEMENTATION AND PROCESS STUDY TEAM FINDINGS

For the Implementation and Process Study team, the findings were generated from the following data sources:

- 25 key informant interviews conducted with Performing Provider System's (PPS) administrators and staff who were knowledgeable of PPS formation, implementation of the DSRIP program's goals, and ongoing activities.
- A survey of project-associated providers (N=897), also referred to as partners, conducted to obtain feedback regarding the implementation of specific projects (N=1,691) as well as the perceived effectiveness of the DSRIP program overall.
- Six focus groups of project-associated providers conducted in the Capital District and Adirondack regions to obtain further insight into provider experiences. Additional focus groups of project-associated providers will be conducted in different regions each year, so by the end of the evaluation, each region will be represented.
- The Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan survey (N=10,884 in Demonstration Year 1; N=7,915 in Demonstration Year 2) results provided information about patient perspectives of their health care after implementation of the DSRIP program.

Findings of the Implementation and Process Study team are summarized below. Detailed findings are available in Section IV. The findings are organized in two main sections. The first section presents findings related to the organizational development of Performing Providers Systems and are drawn mainly from key informant interviews with PPS administrators and staff and the survey of projected associated partners. The second section presents findings related to Performing Provider System performance and are drawn mainly from the patient survey of project associated partners and CAHPS survey data.

Findings Related to the Organizational Development of PPS

Start-Up

Regarding the start-up of the PPS, main findings were obtained concerning the application process, project selection among the PPS, and PPS formation.

Application Process and Early Partner Engagement

- The DSRIP PPS application process provided the opportunity to foster cross-sector partnerships, sometimes
 comprised of competing entities, to collaborate on a plan to promote system transformation and advance health
 care reform. Growing pains related to formation were common though most PPS key informants reported an
 organizational structure that was currently working to further their goals.
- Overall, the general consensus was that involving a broad-based coalition of all types of participating providers early on was vital to produce a well-functioning group and enable continued engagement.

Project Selection

- PPS were required to select projects that would help them to invest in technology tools and human resources that could better serve target populations and to be consistent with the DSRIP program's goals.
- The overwhelming majority of PPS described utilizing the results of their community needs assessment to select the projects, and the community needs assessment was perceived as beneficial to inform project selection. Exceptions

to this included several PPS identifying one or two particularly problematic projects which they would have selected differently if given the opportunity.

- · Project selection also involved extensive dialogue and negotiation with both internal and external PPS partners.
- · PPS key informants reported a lack of alignment between the projects and Pay for Performance measures.

PPS Formation and Implementation

- PPS described an extensively engaged network which they leveraged to form their PPS. For example, PPS formed
 advisory councils, developed a consensus model and networked with major stakeholders, including local government,
 behavioral health, social service organizations, and community hospitals setting the direction for future governance
 committees.
- Several PPS, especially those which evolved from a unified health system or which had already started DSRIP-like
 projects, reported that their existing structures enabled them to quickly pivot to the requirements of PPS formation
 and related work.
- Early operations were particularly difficult for those that did not have a pre-existing infrastructure. The development of a new entity was challenging for some.

PPS Operations

Regarding the operationalization of the intervention, main findings were obtained concerning the project milestones and performance measures, partnerships, funds flow, and other aspects of the implementation of the reform as noted below:

Project Milestones and Performance Measures

- Overall, PPS key informants and DSRIP-partners reported challenges in deciphering project milestone requirements
 and developing informed and meaningful targets. They also criticized continually changing requirements; these
 changes reverberated down to project-associated providers as they described devoting time and staffing to meet
 requirements, only to have the requirements change.
- · PPS key informants did not perceive a clear source of consistent guidance on projects.
- · Stakeholders, both PPS key informants and DSRIP-partners, felt that they set targets unrealistically high.
- Many PPS described a tension between focusing on performance measures versus their project milestones and were
 unsure where to focus their current efforts especially as the project shifts to Pay for Performance measures and away
 from Pay for Reporting measures.

Partnerships

- Some PPS had difficulty including their largest partners in the transformation efforts due to the partners' skepticism that involvement would help them meet their organizational and financial goals.
- Study participants pointed to PPS new work with community-based organizations as fundamental to their success.
 They stated that the value placed on the work of the community-based organizations had generated positive feedback, and that communication between clinical networks and community-based organizations had improved.

Funds Flow

- · Many PPS moved funds to partners quickly and felt that this improved their partnership relationships.
- · Others took a more conservative approach in order to maintain accountability for how funds were spent.
- PPS that did not have an organizational structure pre-dating the DSRIP program lacked the infrastructure to move funds as quickly.

PPS Overlap

- There were a wide range of unanticipated issues for PPS with overlapping service areas. Partners working with multiple PPS were sometimes frustrated by differing interpretations of the DSRIP program's rules by each PPS.
- Some PPS were viewed as easier to work with, or provided higher rates for services, so project-associated providers in their service area did not work with other PPS.

Value Based Payments

- Almost all the PPS reported major preparatory activities for the shift to value based payments with their partners. These
 activities included building educational tools for primary care, behavioral health, and community-based partners.
- Some PPS began with many partners already having value based payment-equipped models and others with few partners equipped to implement value based payment.
- Community-based organizations needed more assistance in preparing for value based payments and sometimes felt that the trainings provided were not applicable to them.
- · Many key informants saw value based payment as fundamental to the DSRIP program's transformation of health care.

Accessing, Measuring, and Reporting Data across Stakeholders

- PPS did not have full access to all NYS DOH data (including, but not limited to, performance and attribution data)
 during Demonstration Years 0-2, which made it difficult to obtain the information they needed to develop projects
 and track progress.
- Study participants also noted that it was difficult to use State-provided data that had a long time-lag, or to target patients who were not assigned to a primary care provider.
- While it was a challenge in the beginning, by the time of the interviews in Demonstration Year 3, most of the PPS had data systems that collected most of the data they needed from project partners.
- Many project-associated providers wished they had electronic medical record systems that were compatible across project-associated providers, and the ability to view NYS DOH-provided data.
- Regional Health Information Organizations (RHIOs, now known as Qualified Entities) were often not seen as helpful in providing data to PPS and project-associated providers in a useful format.

Workforce Issues

- PPS felt that training health care workers in care coordination, motivational interviewing, and lesbian, gay, bisexual, transgender, and queer (LGBTQ) health care competency had been very successful.
- · Some PPS felt that workforce milestones were unrealistic.

Internal and External Support System and Accountability Structures

Committee and Governance Structure

PPS overwhelmingly found their governance and committee structures from startup to current status to be beneficial.

Technical Assistance

- · Perceptions of the DSRIP PPS Account Support Team and the Independent Assessor were mixed.
- Salient's DSRIP performance dashboards, statewide meetings run by Public Consulting Group (PCG), and the KPMG-led Medicaid Accelerated eXchange (MAX) Series were generally seen as helpful.

Findings Related to PPS Performance

Partners' Satisfaction and Perceived Effectiveness

A survey of project-associated partners (N=897) conducted to obtain feedback regarding the partners' implementation of specific projects (N=1,691) as well as the perceived effectiveness of the DSRIP program showed that:

- About two-thirds of Partner Survey respondents were satisfied or very satisfied with the implementation and operation of their projects.
- Forty percent of partners indicated that the DSRIP program improved partner communication and improved understanding of patient needs.

- · Two-thirds of respondents said that the DSRIP program had changed the way their organization provided services.
- Partners involved in projects aimed at increasing behavioral health services were significantly more likely to report many benefits of the DSRIP program on primary care and behavioral health services integration, including:
 - » improved communication leading to more coordinated care;
 - » improved recognition of mental health disorders;
 - » increased primary care provider use of behavioral health interventions;
 - » decreased stigma of mental health conditions;
 - » improved understanding of patient needs;
 - » improved patient and provider satisfaction;
 - » improved clinical outcomes; and
 - » increased productive capacity (i.e. service capacity).

Patient Experience

- · Overall, patients were satisfied with their health care providers and care coordination.
- Nearly all project-associated providers felt that patients were receiving better care since the launch of the DSRIP program.

TIME SERIES ANALYSIS TEAM FINDINGS

The Time Series Analysis team laid the groundwork required for evaluating the New York State DSRIP program's effect on system transformation, health care quality, and population health. This included carrying out a thorough review of the literature studying DSRIP-like health insurance reforms and their impact, and then formulating a research design that would statistically tease out the effect of the DSRIP program from these reforms. The literature review provides a background under which the DSRIP program was introduced in New York State. It gives an overview of how other health reforms, especially Medicaid expansion under the Affordable Care Act, were already affecting the performance measures that the DSRIP program is motivated to improve. Detailed findings of the literature review are available in Section V. An assessment of the current state of research in this field allows the Time Series Analysis team to formulate an analytical framework that can control for time trends, patient and provider level characteristics, and external shocks, such as the impact of Medicaid Expansion, and determine how much of the change is attributable to the DSRIP program.

COMPARATIVE ANALYSIS TEAM FINDINGS

The Comparative Analysis team performed a literature review of §1115 Medicaid waivers since 1982 to provide the Comparative Analysis team with additional content from which it will develop and apply its methodology in conducting this evaluation. The results of the §1115 Medicaid waiver literature review have informed the design, variables, and methodologies that will be used in the New York State DSRIP evaluation. The Independent Evaluator has confirmed that the planned mixed methods approach to evaluation is appropriate in this context and is consistent with past similar §1115 Medicaid waiver evaluations. Specifically, the Independent Evaluator will be using similar time series analysis and difference-in-differences methodologies to assess performance, followed by qualitative content analysis which will aid in the contextualization of our findings. The Comparative Analysis team will ultimately use the results of this literature review to compare historical performance on §1115 Medicaid waivers to how the NYS DSRIP program performs on its overall goal of reducing avoidable hospital use by 25%. Detailed findings from the literature review are available in Section VI.

STAKEHOLDER THEMES

Based on a synthesis of all stakeholder input, the following themes are noted:

• Communication: Stakeholders' ability to receive clear information on all aspects of the DSRIP program is important, as it

affects daily tasks, coordination of in-house and between-provider services, and overarching implementation decisions.

- **Training:** Training and education of partners are critical components of ongoing implementation of the DSRIP program. While a lot of successful training has been taking place, stakeholders would find the following to be useful: additional value based payment training; tailoring training for different types of partners, and revisiting training types and locations; and training all levels of the health care workforce, as possible, on work flow changes and transformational goals.
- Data/IT Infrastructure and Support: Improving data sharing and infrastructure will assist PPS operations.
- DSRIP Payments/Funds Flow: Payment models should be assessed for efficiency and fairness.
- Programmatic Changes: Broadening the DSRIP program to include Medicare and uninsured patients and extending
 the DSRIP timeline would assist in effecting long-term system change, although stakeholders recognize these are
 beyond the scope of the current program.

FUTURE PLANS

The Implementation and Process Study team will continue to collect data from PPS and DSRIP-associated partners in the two remaining research cycles via key informant interviews, focus groups, and provider surveys. Additionally, the work will continue with the secondary analysis of the results from the CAHPS survey for each research cycle.

The Time Series Analysis team obtained access to the Medicaid Data Warehouse (MDW) and will obtain access to Statewide Planning and Research Cooperative System (SPARCS) data in early 2018. It will begin its analysis by performing a descriptive analysis of the performance metrics used by New York State. This will provide a comprehensive view of how these measures changed for the New York State Medicaid population attributed to the DSRIP program. Then, to find a suitable comparison group, all-payer data from the SPARCS will be matched to the MDW to study the trends in both the Medicaid and non-Medicaid population in the pre- and post-DSRIP periods. If a proper comparison group is not statistically established, then further efforts will be made to create such a group (e.g., synthetic control) for, at least, a subset of the research questions. This process will provide the Time Series Analysis team with a proper understanding of what analytical method can be used to answer each research question. Findings from these analyses will motivate a deeper dive into the mechanisms by which the DSRIP program is generating the observed changes.

The Comparative Analysis team aims to contextualize the results of the New York State DSRIP program with findings from other states' DSRIP waivers. At the culmination of the New York State DSRIP evaluation, the Comparative Analysis team will compare findings from the literature, qualitatively, with findings of the New York State DSRIP program, which aims to achieve its "primary goal of reducing avoidable hospital use by 25% over five years" (NYS DSRIP Evaluation Plan). This analysis will be completed following all data collection and analysis for all five demonstration years of the New York State DSRIP program to ensure the most complete and current results. The Independent Evaluator will not be performing specific analyses on non-New York State datasets beyond performing a comparative literature review.

CONCLUSIONS

Through the efforts of the Implementation and Process Study team, a breadth of data was collected from DSRIP program stakeholders throughout 2017. Overall, many participants reported satisfaction with their experience with the DSRIP program and with the progress they were able to achieve. However, participants also reported very specific critiques. While all perspectives have not yet been captured, most stakeholders reported identifying real progress toward a health care transformation due to the DSRIP program, albeit with some major caveats or frustrations. Future study is recommended, especially as the DSRIP program moves further toward performance related payment structures and enters into the second half of the demonstration.

The Time Series Analysis team laid the groundwork required for evaluating the New York State DSRIP program's effect on system transformation, health care quality, and population health. This included carrying out a thorough review of the literature studying DSRIP-like health insurance reforms and their impact, and then formulating a research design that would statistically tease out the effect of the DSRIP program from these reforms. The literature review provides a background under which the DSRIP program was introduced in New York State. It gives an overview of how other health

reforms, especially Medicaid expansion under the Affordable Care Act, were already affecting the performance measures that the DSRIP program is motivated to improve. An assessment of the current state of research in this field allows the Time Series Analysis team to formulate an analytical framework that can control for time trends, patient and provider level characteristics, and external shocks, such as the impact of Medicaid Expansion, and determine out how much of the change is attributable to the DSRIP program.

The results of the §1115 Medicaid waiver literature review conducted by the Comparative Analysis team have informed the design, variables, and methodologies that will be used in the New York State DSRIP evaluation. The Independent Evaluator has confirmed that the planned mixed methods approach to evaluation is appropriate in this context and is consistent with past similar §1115 Medicaid waiver evaluations. Specifically, the Independent Evaluator will be using similar time series analysis and difference-in-differences methodologies to assess performance, followed by contextualization of its findings with the Implementation and Process qualitative data. The Comparative Analysis team will ultimately use the results of this literature review to compare historical performance on §1115 Medicaid waivers to how the NYS DSRIP program performs on its overall goal of reducing avoidable hospital use by 25%.

Section III

Background and Year 1 Evaluation Activities

CONTEXT FOR THE EVALUATION PROJECT

In 2010, the New York State Medicaid system was in crisis. At the time, there were 5 million Medicaid recipients, costing a total of \$53 billion, with a 13% annual growth rate. These increases occurred during a period of declining tax rates. On a per recipient basis, New York State Medicaid costs were twice the national average. New York State ranked last in the nation for avoidable hospital use, an important indicator of both the costs and quality of a health care system. In 2011, Governor Cuomo created the Medicaid Redesign Team in New York State, which put Medicaid reform on the legislative agenda (Hamblin, et al., 2014). Below is a description of the New York State policy interventions for Medicaid, collectively referred to as the Delivery System Reform Incentive Payment (DSRIP) program, as well as the goals of the Independent Evaluation.

DETAILED BACKGROUND

In April 2014, the federal Centers for Medicare and Medicaid Services (CMS) approved the New York State Medicaid waiver request in the amount of \$8 billion, to be disbursed over five years, with \$6.42 billion of this allotment dedicated to the DSRIP program. The Delivery System Reform Incentive Payment program seeks to achieve a 25% reduction in avoidable hospitalizations via restructuring of the health care delivery system in New York State, by transforming it into a high performing system (NYS DOH, 2015). It is important to note that avoidable hospital use encompasses not only avoidable hospital readmissions, but also inpatient admissions and emergency department (ED) visits that could have been avoided if the patient had received proper preventive care services (Gates, Rudowitz, & Guyer, 2014). The Delivery System Reform Incentive Payment program is overseen by the NYS DOH and will end on March 31, 2020.

DSRIP Goals and Objectives

The New York State Department of Health has stated that the overall goal of the DSRIP program is to reduce avoidable hospital use by 25% over the five-year period. Specific goals are to:

- 1. Transform the health care safety net at the system and state levels.
- Reduce avoidable hospital use and improve other health and public health measures at both the system and state levels.
- 3. Ensure that delivery system transformation continues beyond the waiver period by leveraging managed care payment reform.
- 4. Provide near term financial support for vital safety net providers at immediate risk of closure.
- 5. Increase collaboration by requiring communities of eligible providers to work together to develop their DSRIP projects (NYS DOH, 2015).

The specific objectives to meeting these goals are: removing silos, developing integrated delivery systems, enhancing primary care and community-based services, and integrating behavioral health and primary care. More broadly, this aligns with the Triple Aim of better care, better health outcomes, and lower costs. For the DSRIP program, behavioral health is defined as encompassing both mental health and substance use.

As a CMS STC requirement, the DSRIP program emphasizes a shift in the payment system away from the traditional fee-for-service system towards a value based payment system. Jason Helgerson, the New York State Medicaid Director, at that time, stated that this system is the "most ambitious value based payment system in the country." Value based

Backaroling and Vear 1 Evaluation Activities

payment is designed to place value on quality care; thus, the payment will be structured to pay for "value over volume." Managed Care Organizations and Performing Provider Systems that evolve and legally restructure to become IPA or ACO contracting-entities can choose different levels of value based payment, which are expected to increase as New York State progresses through the implementation of the DSRIP program.

Performing Provider Systems

Provider applications for DSRIP program funding were not accepted from single entities, but rather from collaborative initiatives. This required the formation of partnerships, referred to as PPS, which include cooperation between facilities such as: hospitals, health homes, skilled nursing facilities, diagnostic and treatment centers, Federally Qualified Health Centers (FQHCs), behavioral health providers, home health care agencies, and other key stakeholders. There are a total of 25 PPS across New York State. Attribution is the process used in the DSRIP program to assign a Medicaid member to a PPS, ensuring that every Medicaid beneficiary is assigned to only one PPS. The first task each of the PPS had to complete during formation was to perform a community needs assessment. The results of this assessment enabled the PPS to choose and implement projects that were most appropriate for the health needs of the communities for which they serve.

Once the PPS were created, applications approved, and project implementation began, the CMS STC also required an ongoing opportunity for those PPS to cross share their knowledge and experience. Thus, annually, NYS DOH hosts annual PPS learning collaboratives which are called Learning Symposiums that foster a collaborative learning environment based on data transparency principles. These symposiums allow all PPS "to seek peer-to-peer (provider-to-provider) and community stakeholder input on project level development of action plans, implementation approaches, and project assessment" (NYS DOH, 2016). During the Learning Symposiums, PPS have an opportunity to interact with NYS DOH leadership, share their successes and learn about activities and accomplishments of other PPS, participate in workshops, and engage in deep discussions about implementation issues and strategies (NYS DOH, 2016). Additional opportunities for learning, sharing knowledge, and support are available through quarterly All PPS meetings hosted by the NYS DOH, a Medicaid Accelerated eXchange (MAX) program that uses a Rapid Cycle Continuous Improvement (RCCI) data-driven approach to facilitate collaboration and change (NYS DOH, n.d.), and other technical assistance workshops.

DSRIP Program Domains

The DSRIP program projects are organized into four Domains, with Domain 1 focused on overall PPS organization and Domains 2-4 focused on various areas of transformation (NYS DSRIP program Project Toolkit, 2018). The four domains are shown below along with their associate subcategories.

- Domain 1 Organizational Components and Overall Project Progress
- **Domain 2 -** System Transformation Projects
 - » Including: creating an integrated delivery system, implementation of care coordination and transitional care programs, connecting settings (navigation and telemedicine), and utilizing patient activation to expand access to community care for special populations.
- Domain 3 Clinical Improvement Projects
 - » Including: behavioral health, cardiovascular health, diabetes care, asthma, HIV/AIDS, perinatal care, palliative care and renal care
- Domain 4 Population-wide Projects
 - » Including: promotion of mental health and prevention of substance abuse (MHSA), prevention of chronic diseases, prevention of HIV and STDS, and activities that promote healthy women, infants and children

PPS Application Readiness

Each PPS submitted its DSRIP Project Plan to the New York State Department of Health that comprised:

- · A selection of Domain 2, 3, and 4 projects,
- · A rationale for selecting the projects,
- · Specific goals,
- · A description of how the projects would change the system,
- · A description of project activities, and
- · A justification for the funding.

Each PPS was required to perform a thorough community needs assessment in order to understand the demographics and health care needs of the population in its catchment area, and the health care and community wide resources that were available. This formed the basis on which each PPS chosen projects were tied to its goals of system transformation and reducing avoidable hospital use. The PPS chose a minimum of five and a maximum of 10 projects for their Project Plan valuation process. Some PPS, primarily the major public hospitals, received NYS DOH approval to pursue an 11th project in their area. The main goal of the 11th project was to incorporate uninsured members into the DSRIP program and to reach out to low and non-utilizing Medicaid members who might otherwise end up in the hospital for a preventable visit. DSRIP project selection is discussed in more detail in the next section.

The DSRIP project plans were reviewed by the Independent Assessor to ensure their compliance with the DSRIP program Special Terms and Conditions (STC). The Independent Assessor also scored each DSRIP project plan and provided its recommendations for their approval or rejection. A panel of non-conflicted experts and public stakeholders reviewed the Independent Assessor's recommendations and made decisions to accept, reject or modify them. These were then passed on to the New York State Commissioner of Health for final determination. Once approved, project valuations were performed by the Independent Assessor. The maximum value of each DSRIP application was calculated based on the choice of projects, an external valuation benchmark, application score, speed and scale commitments and the size of the attributed Medicaid population for each project. The maximum application value represented the highest possible financial allocation a PPS may receive for its project plan over the duration of the DSRIP program.

DSRIP Project Selection

The potential projects outlined in the Project Toolkit were designed to meet the core DSRIP program goals of reducing avoidable hospital use and transforming the New York State health care system into a financially viable, high performing health system. Each PPS selected a specified number of projects from Domains 2-4 based on their community needs assessment. The PPS were required to select a minimum of five projects and a maximum of ten projects. Specifically, all PPS had to select two to four system transformation projects (Domain 2); two to four clinical projects (Domain 3); and one or two population-wide projects (Domain 4). The PPS selecting ten projects were eligible to pursue an 11th project. As noted previously, the 11th project focused on using patient activation to expand access to community-based care for the uninsured and non-utilizing and low utilizing Medicaid members. In order to be eligible for the 11th project, a PPS had to demonstrate its network had the capacity to handle an 11th project and was in a position to serve the uninsured, and low and non-utilizing Medicaid populations in its geographic area. Public hospital PPS in a specified region had the first right of refusal in taking on the 11th project and having the uninsured, as well as non-utilizing and low-utilizing Medicaid member populations in their region, attributed to their PPS. More detailed information on DSRIP project selection criteria is provided in the DSRIP Project Toolkit (https://www.health.ny.gov/health_care/medicaid/redesign/docs/dsrip_project_toolkit.pdf).

SUMMARY OF YEAR 1 EVALUATION ACTIVITIES

All three research teams of the Independent Evaluation have been active from late 2016 to early 2018 in gathering primary data from the field or applying for approvals to gain access to administrative data from the Medicaid Data Warehouse (MDW), Statewide Planning and Research Cooperative System (SPARCS), and Vital Statistics. During 2017, the Implemen-

tation and Process Study team performed extensive fieldwork concerning the DSRIP implementation processes and their activities. Additionally, the Implementation and Process Study team produced separate reports for each of the 25 PPS to share interim results of the DSRIP evaluation to assist them with continuous quality improvement efforts. The Time Series Analysis and Comparative Analysis teams performed extensive literature reviews of the work to date on Medicaid reforms and methodological issues.

Implementation and Process Study Year 1 Activities

Overall Approach

The Implementation and Process component used four major data sources to collect qualitative information from a number of stakeholders in order to obtain a diverse perspective and maximize the information collected. Stakeholder perspectives were gathered and synthesized from DSRIP planners, administrators, partners, and beneficiaries, through four data sources:

- · Focus groups with project-associated partners;
- · Semi-structured key informant telephone interviews with PPS administrators and staff;
- · Statewide electronic survey of DSRIP-engaged partners; and
- · Patient surveys.

These data sources were used to collect data on three major topics: the DSRIP program overall, individual projects, and patient experiences (see Table 1). The details of each data source are described in the sections below and Table 2.

Table 1. Data sources used to address each area of inquiry

Areas of Inquiry	Key Informant Inter- views with PPS Admin- istrators and Staff	Focus Groups with Partners about Projects	Surveys of Patients	Statewide DSRIP-Engaged Partner Survey		
D						
Program planning, operation, and effectiveness	Χ	Χ		Χ		
Program outcomes and challenges	Χ	Χ		Χ		
Plans for program sustainability	Χ			X		
Effectiveness of governance structure and provider linkages	Χ	Χ				
Facilitators and barriers to PPS achieving progress on Pay for Reporting/Pay for Performance metrics	Χ	X		Χ		
Contractual and financial arrangements	Χ	Χ		Χ		
Challenges in the delivery of patient care	Χ	Χ		X		
The effect of other ongoing health care initiatives (e.g., New York Prevention Agenda, Affordable Care Act) on DSRIP implementation and operation	Χ	X		Χ		
Progress/effectiveness of projects focused on system transformation	Χ	X		Χ		
Progress/effectiveness of projects focused on behavioral health	Χ	X		Χ		
Progress/effectiveness of projects focused on clinical improvement and population			Χ	Χ		
Identify Pay for Reporting/Pay for Performance issues that are characteristic of particular strategies or projects	X			Χ		
Patient Experience						
Patient satisfaction and experience	Χ	Χ	Χ			

Table 2. Summary of data sources for implementation and process study

		PPS Key Informant Interviews	Partner Focus Groups	Statewide Partner Survey	Patient Survey*
١	What	Key Informant Interviews conducted to collect information on PPS organizational development and perceived performance.	Focus groups of project-associated partners to collect information on their perceptions of the DSRIP program.	Survey of project-associated partners to collect information on the functioning of individual projects.	X Survey to collect information on patient perspectives on health care providers from PPS attributed Medicaid members
١	When	July – August 2017	November 2017	September – November 2017	Demonstration Year 1: September 2015 – December 2015 Demonstration Year 2: September 2015
,	Who	PPS administrators and staff at each of the 25 PPS who were most knowledgeable about DSRIP start-up, implementation, administrative components, and challenges in Demonstration Years 0-3.	Partners engaged in PPS projects from the Capital District and Adirondack regions.	Partners engaged in PPS projects.	tember 2016 – November 2016 Medicaid members ages 18-64 who were attributed to one of the 25 PPS and had at least one visit with a primary care or obstetrics/gynecology provider in the PPS network.
	Final Sample Size	All 25 PPS participated. Number of key informant interviews per PPS ranged from one to a maximum of ten.	A total of 33 engaged partners. Twenty-two partners participated in the Capital District focus group and 11 in the Adirondack focus group.	A total of 897 usable returned surveys for a response rate of 32%. Respondents provided information on a total of 1,691 projects.	Demonstration Year 1: A total of 10,884 usable returned surveys for a response rate of 31%, after excluding ineligible participants. Demonstration Year 2: A total of 7,915 usable returned surveys for response rate of 28%, after excluding ineligible participants.
ı	How	Semi-structured telephone interviews	In-person focus groups with a trained facilitator and a sep- arate note-taker	Web-based survey	Mail and phone survey
1	OSRIP Fime Period Covered	Demonstration Years 0-3	Demonstration Years 0-3	Demonstration Years 1-3	Demonstration Years 1 and 2
١	Where	Statewide	Capital District and Adirondack regions	Statewide	Statewide

^{*}The Implementation and Process team analyzed secondary data collected by the Independent Assessor through a vendor using the Consumer Assessment of Healthcare Providers and Systems survey (CAHPS).

PPS Key Informant Interviews

Sampling: From July through August 2017, interviews were conducted with PPS administrators and staff. Using purposive sampling¹ (Bryman 2012; Creswell 2013; Patton, 2002), the evaluation team identified administrators at each of the 25 PPS who were most knowledgeable about DSRIP program start-up, implementation, administrative components, and

¹ Purposive sampling employs a criterion-based method. The inquiry selects sample units because they have particular features or characteristics. This ensures that all key stakeholders of relevance are engaged in data collection. This method ensures that the impact of the criterion can be explored across types (Ritchie, Lewis, McNaughton Nicholls, & Ormston, 2003).

challenges in the first two years of the DSRIP program. Generally, the sample included one or more of the following individuals:

- · Chief Executive Officer,
- Chief Operating Officer, or the individual currently responsible for all operations,
- · Someone with authority who was involved in PPS startup,
- · Fiscal officer or individual involved in financial transactions, and
- · Other individuals identified by either the NYS DOH or the PPS who were vital to the ongoing operations of the PPS.

Semi-structured interview guide development: Development of the interview guide included identification of major topics that were within the scope of the research questions of the implementation and process study. The final guide included approved questions with a series of prompts to generate more specific examples or experiences. Furthermore, the interview guide was tailored to individual roles and PPS organizations once participants were identified. For example, some PPS had legacy staff who were with the project since initial formation and other PPS experienced full turnover. As such, questions were developed to be flexible within the knowledge scope of interview participants. Publicly available documents such as the Mid-Point Assessment Reports were also reviewed to provide background information to help guide each interview. Major topics included:

- · Initial formation of the PPS,
- · Early operations,
- · Administrative issues and structural configurations,
- · Challenges and successes, and
- · Perceived outcomes and recommendations.

Interview participation and process: All 25 PPS participated in the Key Informant Interviews and ranged from one PPS Executive to a maximum of 10 key informants. An additional interview was conducted with an exiting leader at one PPS who was deemed to have pivotal information about the formation and development of the PPS. The interviews were conducted by the same two qualitative researchers for reliability. Notes were taken concurrently to the telephone interview and then one researcher listened to the tape to produce the final transcript.

Analysis: Familiarization with the data, including the transcripts and the interview guide, yielded a list of important topics that arose from the data. These topics were sorted into a hierarchy of themes and subthemes, creating an initial thematic framework consistent with the methodology provided by Spencer, Ritchie, O'Connor, Morrell, and Ormston (2003). This process generated nine major themes: formation, challenges, successes, committees, data, technical assistance, value based payment, health care, and governance. Transcripts were indexed to themes and sub-themes to identify initial commonalities, repeating themes, and items not discussed by all PPS.

Analytic matrices were developed for each theme, consistent with Miles, Huberman, and Saldana's approach, which defines methods for data reduction, data display, and generation of findings (2013). Separate matrices were created for each theme that were comprised of a case identification column (indicating the PPS's name) as well as columns for each subtheme. Data were extracted from interview transcripts and entered into their respective subtheme columns as data summaries and/or direct quotes. After all transcripts were indexed and data extracts were inputted into the matrices, the researchers read through each case, pulling detected elements within each subtheme's response and entering them into a separate column. Detected elements identified the range of perceptions, experiences, and behaviors that were collected and the aspects that differentiated them. Once these elements were organized across each PPS and for each theme, researchers determined their underlying dimensions. Underlying dimensions for each theme were organized into the initial thematic framework. Data elements for each sub-theme were indexed across the underlying dimensions to identify repeating and differing elements. Finally, the elements were categorized into those typologies. Themes were collapsed and merged into the topics discussed below for organization and clarity. See Appendix A for the Key Informant Interview Topic Guide.

Partner Focus Groups

In November 2017, the first research cycle of focus groups of project-associated partners was conducted in the Capital District and Adirondack regions.² The focus groups were designed to yield information about how DSRIP program transformation is affecting various partners.

Focus group guide development: The focus group procedures were guided by research findings on best practices for qualitative data collection. Focus groups function best when groups are somewhat homogenous, which fosters greater cooperation, greater willingness to communicate, and less conflict among group members (Stewart and Shamdasani, 2015). Thus, the initial plan to host one focus group per PPS was replaced with a hybrid geographic and provider-category based plan. Nine PPS service areas were defined based on the integration of the NYS Economic Development map with service areas provided by PPS.

Four provider groups were developed based on types of project partnerships, Medicaid Analytics Performance Portal (MAPP) network tool-derived categories of partners, and stakeholder commonalities.³ The four partner categories were:

- · Group 1: Primary care physicians (PCPs), Clinic managers, Health Home organizations, and specialists;
- · Group 2: Mental health and substance use professionals;
- · Group 3: Hospitals, nursing home, hospice, and home care professionals; and
- · Group 4: Community-based organization professionals.

Project-associated partners' designated areas of inquiry were thematically arranged and developed into a guide. A singular focus group guide was reviewed by two teams familiar with engaged partners: the Public Consulting Group's Account Support Team and the NYS DOH Office of Health Insurance Programs. From their feedback, four customized guides were developed for each provider category type.

Sampling: Engaged partners were identified using the same methodology as the Partner Survey, described below. An additional categorization was made in order to place partners in the appropriate focus group category using the MAPP tool and publicly available records. The potential participants were contacted and invited to participate in the relevant focus group.

Focus group process: Focus groups lasted approximately 1.5 hours. The same trained facilitator conducted each focus group to ensure consistency, while a separate note taker recorded details and impressions. With permission of the participants, focus groups were audio-recorded using digital voice recorders. A meal was provided for each focus group as an incentive, and to convey appreciation for the participants' time.

Analysis: From November 2017 through January 2018, all focus groups recordings were transcribed, coded, and analyzed for patterns and themes. The first coding of the transcripts was conducted inductively. One coder indexed codes throughout the transcript and a second coder reviewed the coded transcriptions to resolve any issues or note inconsistencies. The second round of coding was conducted deductively in order to facilitate future triangulation of the data with the focus groups and partner survey. Codes were then resolved from the two rounds of coding and grouped into themes.

For this report, findings are presented from four focus groups in the Capital District and two focus groups in the Adirondack region⁴ that participated in this first research cycle of focus groups. Participants in these groups represented organizations which had relationships with five PPS: Better Health For Northeast New York, Inc. (BHHNY); Alliance for Better Health (AFBH);

² Additional focus groups of project-associated providers will be conducted in different regions each year, so by the end of the evaluation, each region will be represented.

³ The MAPP is a performance management system that provides tools and program performance management technologies to the PPS including management of the network of providers and organizations involved in the DSRIP program.

⁴ Because the Adirondack region focus groups were conducted in a less populated area, they drew fewer participants and were separated into two focus groups. The first focus group included participants from Group 1 (primary care physicians, clinic managers, health home organizations, and specialists) and Group 3 (hospitals, nursing homes, hospice, and home care professionals). The second focus group included participants from Group 2 (mental health and substance use professionals). Community-based organizations from Adirondack Health Institute were present at the focus group held in the Capital District region.

Adirondack Health Institute, Inc. (AHI); Leatherstocking Collaborative Health Partners (LCHP); and Central New York Care Collaborative (CNYCC). See Appendix A for the Focus Group Topic Guide.

Statewide Partner Survey

To gather uniform information on the function of individual projects, an electronic survey was administered to project-associated partners.

Survey development: The partner survey was developed to gather information on progress within individual projects, barriers and facilitators to project implementation, perceived effectiveness of the projects, and the DSRIP program overall. The Public Consulting Group's Account Support Team and the NYS DOH Office of Health Insurance Programs both provided feedback on the survey.

Survey topics included:

- · Service provision and project operations,
- · Factors that helped or hindered their implementation,
- · Level of satisfaction with project operation,
- · Reflections on what worked well and less well,
- · Overall perception of the DSRIP program, and
- · Overall perception of projects.

Sampling: To identify respondents, the Implementation and Process team merged the Medicaid Analytics Performance Portal (MAPP) network tool with the Provider Export/Import Tool (PIT)/ Provider Export/Import Tool-Revised (PIT-R) to build a unique contact list of partners for each of the 25 PPS.⁵ Each PPS primary contact was sent the list of partners generated for their PPS and asked to first update the status for partners (i.e., change status to "not engaged" if a provider was no longer involved, or change status to "engaged" if a provider was now participating in a project), and second to provide contact and engagement status information for any new partners. Twenty-four (24) of the 25 PPS responded and returned an updated list of engaged partners; engagement for the remaining PPS was determined by the DSRIP Demonstration Year 2 list alone.

Survey Process: The Implementation and Process Study team then sent each email address corresponding to an engaged provider a message asking the provider to complete the Partner Survey, with a personalized link to the survey in Qualtrics. In total, survey links were sent to 2,794 email addresses.⁶ Simultaneously, contacts at each PPS were encouraged to alert their provider network to the survey and encourage completion.

The survey launched in September 2017 on the Qualtrics online survey platform and closed in November 2017. A total of 1,235 completed surveys from unique individuals were returned. A total of 315 respondents opened the survey but did not answer any questions, and 23 more were determined to be unusable for various reasons (e.g., two participants did not give a coherent response in any text box, including their name). These methods resulted in 897 useable responses, for a final response rate of 32%. Individual respondents could answer project evaluation questions for up to three projects, resulting in a total of 1,691 project-based evaluations. For this report, partner survey data were cleaned by the evaluation team and then analyzed using SPSS. See Appendix A for additional details on the survey analysis methodology and the survey instrument.

Patient Survey (CAHPS)

Patient perspectives were assessed via the Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan survey. The survey included the CAHPS Clinician & Group Adult Medicaid core survey (Primary Care, version 3.0), a nationally vetted tool designed to assess the performance of clinicians and medical groups. Items addressed several domains of patient experiences, such as receipt of timely care, communication with doctors, and overall satisfaction with

⁵ The PIT/PIT-R tool is a CSV file that is based on each PPS network list.

⁶ As some partners were part of several PPS, they received multiple requests for the survey. Partners were asked to respond to only one survey for up to 3 total combinations of projects and PPS.

their provider. In addition, the survey included 18 supplemental questions of interest to NYS DOH concerning health literacy, health promotion, and care coordination.

The Public Consulting Group, which serves as the Independent Assessor for the DSRIP program, conducts the CAHPS survey for each of the 25 PPS through a vendor. The Independent Assessor works with the NYS DOH Office of Quality and Patient Safety to determine sample frames in August, then deploys the survey between September and December, and finally validates results in the spring of the following year. The Results are analyzed by the survey vendor and validated by NYS DOH, with PPS specific reports provided to the PPS. The results of the survey are used in calculating performance metrics across several projects and multiple domains.

The surveys were administered to a sample of Medicaid members, aged 18 to 64, who were attributed to a PPS and had at least one visit with a primary care or obstetrics/gynecology provider in the PPS network. Each year's survey targeted 1,500 adults from each of the 25 PPS in New York State. Surveys were sent to 37,500 members following a combined mail and phone methodology (three mailings, followed by a phone call follow up of non-responders. Some intended survey respondents were deemed ineligible for participation⁷ and were excluded from the total sample population size when determining the response rate.

The Implementation and Process Study team conducted secondary analysis on this dataset. The CAHPS data presented in this report were collected in DSRIP Demonstration Years 1 and 2, providing insight into the early implementation of DSRIP. The Demonstration Year 1 survey was conducted between September 14, 2015 and December 7, 2015. A total of 10,884 usable responses were received out of a total of 35,356 eligible participants, resulting in a nearly 31% response rate. The Demonstration Year 2 survey was conducted between September 16, 2016, through November 30, 2016. A total of 7,915 usable responses were received, resulting in a 28.1% response rate. See Appendix A for the CAHPS survey instrument.

Time Series Analysis Year 1 Activities

The Time Series Analysis component focuses on evaluating the performance of DSRIP by studying its impact on system transformation, health care quality, population health, and health care costs using a pre-DSRIP/post-DSRIP time series design. The analysis began with a thorough review of literature studying DSRIP-like health insurance reform initiatives in the United States. The purpose of the review is to ensure a thorough understanding of possible effects that the DSRIP program may have in transforming the health care system of New York State. It also allows the Times Series Analysis team to build high quality research designs by putting them in the perspective of peer-reviewed designs studying similar health care reforms. One of the key take-away lessons for the Time Series Analysis team is that there have been several health care reform initiatives, primarily from Medicaid expansion under the Affordable Care Act (ACA), that had objectives similar to the DSRIP program and might have already started affecting the New York State health care system in a positive way. To judge the DSRIP program's effectiveness, the Time Series Analysis team will have to disentangle its effects from other concurrent and past policy changes or trends in New York State. The literature review provides the team with prior evidence on these types of trends, and how the pre-DSRIP policy changes affected performance measures similar to ones being studied in this evaluation. This allows the Time Series Analysis team to present a robust statistical analysis and tease out the DSRIP program's exclusive impacts in answering a range of policy questions. A detailed description of the literature review methodology and a summary of the findings can be found in Section V.

The Time Series Analysis team will utilize Fee-For-Service and Managed Care data from the Medicaid Data Warehouse, hospital discharge data from SPARCS, and zip-code level characteristics from the American Community Survey (ACS) to capture the impact of being attributable to the DSRIP program on a range of performance metrics. A list of these metrics and the research questions that the team will answer is contained in Appendix B. The analytical models developed by the Time Series Analysis team will tease out secular time trends, and control for patient, hospital, and regional characteristics. The models will also account for external shocks, such as the impact of Medicare readmissions programs that might have

affected performance metrics such as the rate of readmissions of Medicaid patients. A description of the models and control variables to be used in the analysis are detailed in the Appendix B.

Comparative Analysis Year 1 Activities

Summary of Planning During Late 2016 through Early 2018 for Comparative Analysis

The Comparative Analysis component is primarily focused on assessing the effects of the type of projects adopted by PPS, the relative effectiveness of specific strategies employed within project types, and the contextual factors associated with PPS success or failure to demonstrate improvement in the metrics associated with each domain (NYS DSRIP Evaluation Plan). The Comparative Analysis team's general approach is to use quantitative analysis to assess relative PPS performance on domain-specific metrics over time and supplement this work with qualitative data collection and analysis to provide further contextualization of the findings. Specifically, the approach will include clustering PPS to create comparison groups according to project selections for each PPS. To examine differences and similarities among the PPS, the Comparative Analysis team will apply quantitative methodologies to administrative datasets, which include difference-in-differences analyses and multi-level modeling. The Comparative Analysis team will then supplement its quantitatively oriented approach by analyzing primary data from: 1) focus groups, 2) semi-structured key informant interviews with PPS administrators and staff, 3) surveys of providers with semi-structured interview follow-up, and 4) surveys with patients, to provide further contextualization of the quantitative results.

Further, the Comparative Analysis team will develop a set of domain projects across all DSRIP PPS that includes information important to the Comparative Analysis. This will include information on the timeline (i.e., start and end dates of implementation), planning decisions (i.e., changes that occurred prior to implementation or during implementation), fidelity of the intervention to its original intent (ranked on a continuous scale from low to high), relative success to internal expectations (continuous scale from low to high), and previous work (i.e., was the program new or building upon existing pre-DSRIP activity). This information, collected qualitatively, will allow the Comparative Analysis team to examine variation between PPS within projects and across domains in a way that will contribute to the Independent Evaluator's understanding of the DSRIP program. It also will allow the Independent Evaluator to understand more nuanced differences between the programs and their associated projects. For example, if two projects look the same "on paper," but one is new, and one is based upon an existing initiative, or if one PPS had a contracted relationship with funds flow early on and others did not, the Independent Evaluator might see differential outcomes over time. Similarly, if two projects look the same but are implemented differently, there also may be different outcomes.

§1115 Medicaid Waiver Literature Review Summary of Key Findings

The Comparative Analysis team performed a literature review of §1115 Medicaid waivers since 1982 by compiling every obtainable evaluation report and each peer-reviewed manuscript that was written based on a waiver. The primary purpose of this literature review is to provide the Comparative Analysis team with additional context from which it will develop and apply its methodology in conducting this evaluation. Specifically, the Comparative Analysis team examined the prior publications and reports for the presence of methods and variables that can be used in analyses, for possible control or comparison groups, to help shape hypotheses, and to catalogue the primary evaluation findings. Findings from the §1115 Medicaid waiver literature are summarized briefly in the next section. A detailed description of the literature review methodology and findings can be found in the Section VI.

Literature Review Summary and its Usefulness for the New York State DSRIP Independent Evaluation

The Comparative Analysis team has gained important insights from its systematic review of the §1115 Medicaid waiver literature, many of which are relevant to all components of the Independent Evaluation. The literature review validated that the main datasets (e.g., Medicaid claims data and hospital discharge data), primary quantitative and qualitative analysis methods (interrupted time series analysis and difference-in-differences), and many of the dependent and independent variables that will be used in the New York State DSRIP evaluation have been used in similar Medicaid waiver evaluations. Moreover, the Independent Evaluator has reshaped and/or confirmed several of its hypotheses based on the evidence found in this literature review.

The Independent Evaluator is currently working directly with the administrative data. To the extent possible, the Independent Evaluator will use relevant peer-reviewed journal articles and evaluation reports to inform its data cleaning

exercises and the construction of econometric models. For example, a manuscript that uses difference-in-differences methodology may provide insights on how to organize the comparison groups and ideal time intervals in this evaluation. During the first half of 2018, the Comparative Analysis team anticipates completing the initial data cleaning and descriptive analysis of the New York State data (e.g., Medicaid claims, SPARCS). Initial data cleaning and organization is vital to establishing the framework for econometric modeling (e.g., application of the difference-in-differences methodology). Once these initial steps are completed, the Comparative Analysis team will apply the methods and analytic approaches to the datasets discussed in detail in Appendix C. Taking a sequential explanatory approach, the Comparative Analysis team will then use the qualitative data and associated findings collected during 2017 and 2018 to help interpret its initial quantitative findings.

Section IV

Detailed Implementation and Process Study Findings

OVERVIEW OF FINDINGS

This section details the findings of the key informant interviews, focus groups, and surveys. The findings of these data sources were synthesized to present a comprehensive depiction of early DSRIP implementation through the lens of key stakeholder groups. During data collection, special attention was taken to collect retrospective data from DSRIP Demonstration Years 0-2 as well as to collect current implementation and process data from Demonstration Year 3. Findings are organized into four sections:

- Start-Up
- · Operations
- · Internal and External Support Systems and Accountability Structures
- Perceived Outcomes and Recommendations

For these sections, "PPS key informants" refers to those interviewed in the key information setting and "partners" refers to DSRIP-engaged partners who participated in surveys or focus groups. Qualitative partner responses use a descriptor to identify the category of provider attached to the quote or text (e.g., Primary Care group participant).

START-UP

This section presents the findings related to building the PPS and launching the DSRIP program from the perspectives of the PPS key informants and DSRIP-engaged partners.

The Application Process and Early Partner Engagement

PPS key informants and project-associated partners offered insight into the DSRIP program application process and early partner engagement. The DSRIP program funding solicitation provided the opportunity to foster cross-sector partnerships, often comprised of competing entities, to collaborate on a plan to promote system transformation and advance health care reform.

In many cases, the PPS key informants shared that the application process involved very high levels of engagement with their clinical and community partners. From the development of the community needs assessment to project selection, a wide variety of partners were involved in the process:

It was a very open process with public forums, and it was more of organizations being welcomed to come to hear more about the opportunity and decide whether they wanted to participate, as opposed to [PPS Name] only inviting a few people to attend and participate. They really appreciated it. That included everything from selection of projects, too, and the Community Needs Assessment done at the beginning. The Community Needs Assessment was co-created with others, too. The cooperation even extended beyond the organization and included other PPS lead entities and was done cooperatively. – PPS key informant

PPS key informants also emphasized that engagement with each other and their partners did not just occur because of the financial incentives associated with the DSRIP program. In fact, many had already seen the value of working more

collaboratively with complementary health partners and networks. These findings were consistent with regional focus group results across provider type:

With the medical home and the ACO⁸, we already had a lot of infrastructure there. – **Primary care/hospital Regional focus group participant**

Before DSRIP, we had gotten a grant that allowed us to integrate behavioral health in rural clinics. So, we had already gone down that road of trying to have a clinician sitting in a rural physical clinic, and trying to manage two billing systems, and two HR systems...—Behavioral health Regional focus group participant

While many communities convened planning groups with newly formed coalitions, PPS also leveraged existing relationships with partners to create well-informed collaborative applications. Some PPS key informants indicated that the application process involved public meetings as well as workgroups, where partners met several times per week to develop the application. While, in most cases, a broad-based coalition of planners was found to be beneficial, sometimes a large and diverse group led to difficulty in consensus building:

We pulled together a workgroup or steering committee to write the application. It included three FQHCs°, four [community-based organizations], and [Hospital] as well as other community providers. The whole process of building the application that way was very painful because we had to have a lot of conversations earlier on that other PPS didn't have to yet. – PPS key informant

In some regions where many competitors were organized into a small number of PPS, key informants reported challenges during the initial application development. They also described how the group did evolve to develop better functioning relationships by the final application phase:

The major things that turned the tide was integrating these two PPS. We re-selected all of our projects together. We had 120 people in the meeting in small groups. Each table worked with and reported out the projects selected The willingness to stop, take a breath and let go of what we did independently to collectively pick our projects raised the confidence of the PPS and their ability to hold their own in a larger PPS. The application was developed by all of us as partners. – PPS key informant

Many PPS that did form with competitors were candid in their assessments of being asked to work with their former competitors. Challenges included alignment on key issues, allocation of resources, and leadership structure. Some of these challenges were addressed and resolved in the application phase. However, other PPS described how it took longer to form a healthy working relationship between entities:

It could really be described as "cooperation," or an amalgamation of cooperation and competition, since these entities who came together were previously competitors and remained that way to some extent.

- PPS key informant

DSRIP-engaged-partners were critical of the PPS when they were not included in early decision-making for defining network areas, project selection, and other formation issues:

What we found most frustrating about the process is that when we first became involved, the projects were laid out. The PPS selected the projects that the PPS would be involved in. And, each [sub-geographic region] wrote their own work plans, strategies, and budgets to go along with those projects. Then, it all changed. They became PPS wide projects. — Mental health/substance use Regional focus group participant

Overall, the general consensus was that involving a broad-based group early on was vital to a well-functioning group and continued engagement. For example, one PPS found that that the vast majority of the partners that came on

during the planning process remained engaged as full PPS partners. Overall, PPS attributed early success to their partner engagement efforts and emphasized the lengths to which they had gone to gain buy-in from their partners. Some ways PPS engaged partners early on included an advisory council with a consensus model or active project advisory committee. Other key informants reported that project selection brought partners together. For example, they led a PPS-wide conference for project selection or used local agencies for the community needs assessment and then kept them on as partners. Another mainstay of buy-in was in-person meetings. Though PPS key informants reported scheduling difficulty and reluctance, much positive feedback was given to in-person meetings and the camaraderie they created.

Project Selection

PPS were required to select projects that would require them to invest in technology and human resources that could better serve target populations consistent with DSRIP program goals. Each PPS was required to submit a detailed project plan for each of their selected projects. In that same application, the PPS committed to speed (how fast they could meet their goals) and scale (how many patients would be served, or partners would be included). The selection process and lift off phase was challenging for many of the PPS.

Project selection sometimes resulted from extensive dialogue and negotiation with both their internal and external partners. However, the overwhelming majority of PPS described utilizing the results of their community needs assessment to select the projects. The community needs assessment was a required component of the PPS application, which was slated to be a "comprehensive assessment of health care resources, including behavioral health, and community-based service resources currently available in the service area and the demographics and health needs of the population to be served" (NYS DOH, 2014).

Overall, the community needs assessment exercise was perceived as beneficial to inform project selection. As one PPS key informant reported:

The community needs assessment led to the selection of the right projects for us. All selection was based on data and going through the exercise made us realize certain areas where we already had high performance, wouldn't have a gap to goal, or wouldn't be able to move the dial on that. Some of the analyses put behavioral health at the forefront of our minds, where it wasn't before. We did a regional community needs assessment that was a great exercise in giving us focus. – **PPS key informant**

The community needs assessment was also helpful in informing and aligning partners regarding the actual needs of the community:

Early on, there were a series of community meetings, and our PAC [Project Advisory Committee] was very active at that time. There was a review process where we involved everyone so that we could review the possibilities. We also did a very comprehensive community needs assessment to figure out what gaps there were to fill. We understood a few large needs, like behavioral health and primary care, through this community needs assessment. Then we were working on [gaining] stakeholder agreement. We had a PPS-wide conference in the beginning, and at that time we discussed the community needs assessment with stakeholders. There were some assumptions both proven and novel that came out of the community needs assessment. Then we had to distill down what projects we thought were important and also doable.

- PPS key informant

While most PPS key informants described positive outcomes of the community needs assessment and project selection process, some reported that, in hindsight, they would have selected different projects. The reasons for this were varied and included changes in partnership structure, project design flaws, emerging clinical needs in their community, pressure from a dominant body, or lack of information. One PPS felt that, despite the guidance from the community needs assessment, they still did not select the right projects:

We did not select the right projects. There's one that jumps out immediately, but the [name] project has proven to be a significant hurdle for us because [partners have sold the business or reduced capacity]. It's

been a major struggle in trying to make progress with this because the few places that do have capacity do not align with our hot spot areas or our needs. – PPS key informant

Another PPS had a particularly problematic experience with one project and had to reach out to NYS DOH for assistance after the interpretation of the project changed:

One of the struggles with all project selection is that we had a limited time to absorb what the project was and what it meant, and it was hard to see what the details were on the project. We found a lot of issues with this particular project...The State or Independent Assessor revised the wording on the project. It was a total game changer to us, to the point that we had many discussions with the State and the Independent Assessor, and got some relief on an alternative implementation plan. – PPS key informant

While many PPS reported that they were generally pleased with their projects, a number of PPS also reported that the "11th project" had been problematic. 10 Performing Provider Systems reported that lack of information, changing State calculations, and population needs made them rethink the suitability of the project for their PPS:

The project selection was really based on what sort of staff we had in our various communities and what areas we needed to inject resources and greater services...We probably didn't have all of the right information to understand the uninsured at that point in time. The exchanges were barely up and running; it was hard to understand what the uninsured population looked like. It made the PAM¹¹ survey a nightmare in terms of qualifying someone to meet the survey requirements. They reflected the environment prior to the exchanges. The structuring of the 11th project didn't get the best footing because it didn't have the right understanding of the size, scope, and location of that population and how hard it would be to find the uninsured. Not that we'd eliminate it, but we'd have to size and scale it differently if we knew what the population would be like. – PPS key informant

I'm going to say, in hindsight, I'm not sure adding that 11th project made the most sense for us. After the fact, seeing how the State recalculated the other set of equity programs, I wonder if the PPS would have been better off not selecting the 11th project for the equity project. I'm not sure how well we were qualified for that. – PPS key informant

Some PPS key informants expressed that, in hindsight, they should have selected projects differently given Pay for Performance considerations. Performing Provider Systems reported a lack of alignment between the projects and the Pay for Performance measures on which they are being assessed.

There is no connection between the projects and the Pay for Performance measures. We should have selected projects that would meet the Pay for Performance measures. We lost sight of that in the list of the 44 projects. There is so little correlation between the projects and the Pay for Performance measures. The projects are there to just check-the-boxes and get dollars... If we had to do it over, I'd select new projects. I think a lot of PPS didn't realize that at the time. Meeting the milestones structured in terms of building the organization was the big focus in the beginning, and we lost sight of the end goal because of that. Speed and scale and actively engaged partners were the main focus, and it detracted from the bigger picture.

- PPS key informant

We wish our projects had a greater line of sight with the measures we are being judged on that effect the

¹⁰ The 11th project focuses efforts on uninsured patients and Medicaid low- or non-utilizers, who may benefit from additional primary care services. All of the uninsured patients in the region as well as a NYS determined portion of non-utilizing and low-utilizing Medicaid members are attributed to project 2.d.i. Ownership of this project and attribution for payment was determined by mechanics described in Attachment I- NYS DSRIP Program Funding and Mechanics Protocol (https://www.health.ny.gov/health_care/medicaid/redesign/program_funding_and_me-chanics.htm)

¹¹ Patient Activation Measures or PAM is from Project 2.d.i.. The project is focused on increasing patient activation related to health care paired with increased resources that can help the uninsured as well as non-utilizing and low utilizing Medicaid populations gain access to and utilize the benefits associated with DSRIP PPS projects, particularly primary and preventative services.

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Pay for Performance metrics. Also, if we could go back, we might not have been as insular in our approach and might have involved other organizations in the selection process. – **PPS key informant**

One complaint I've heard from partners in the community is that the asthma project wasn't selected, and this is a big need in our community with many related asthma emergency room admissions. In addition, HIV was an area people felt was neglected, but we actually did select this project. However, there aren't Pay for Performance dollars associated with it, so that takes away a little of the focus on it. The projects we selected do represent our PPS and its neighboring communities and clinicians well. – PPS key informant

PPS Formation and Implementation

Some PPS described building a PPS around their regional hospital. Through an advisory council, they developed a consensus model and networked with major stakeholders, including local government, behavioral health, social service organizations, and community hospitals. In one example, this council merged successfully into a governance committee.

Several PPS, especially those which evolved from a unified health system, reported that their existing structures enabled them to quickly pivot to the requirements of PPS formation and related work.

Our overall governance and the speed with which we were able to get this launched from ground zero was pretty incredible. - PPS key informant

A small contingent of PPS reported that they had already started to make DSRIP-related changes in their current organizations prior to or around the time of the Medicaid Redesign Team (MRT) Waiver because of ongoing strategic initiatives. They attributed these early actions as setting them up for success:

We started a transformation effort here about two years before DSRIP came in terms of reducing unnecessary Emergency Department visits and moving toward value based payments. We had a number of risk-based contracts and level-1 contracts prior to DSRIP. We saw DSRIP as a mechanism to provide levels of collaboration to break down barriers between providers, hospitals, and organizations. – PPS key informant

About 10 years ago, we were doing some work internally with the hospital to reduce risk readmissions for patients with congestive heart failure. We developed a project jointly with [Psychiatric Center] to focus on patients who were being discharged who were receiving good behavioral health care, but no primary care access. We were trying to co-locate these services. We knew this would be really important to have patient data available wherever a patient presented, so we have been working on IT from the beginning. These health information exchanges were very helpful. – **PPS key informant**

The lead agency, [Health Center], was DSRIP-ing before DSRIP. It seemed so logical for us to continue what we were doing in a more formal structure. That was the genesis. Rather than join another PPS, we did it on our own because we were experienced in this area already. – PPS key informant

Early operations were particularly difficult for PPS that did not establish a pre-existing infrastructure. The development of a new entity was challenging for some. This was especially the case when a hospital or organizational structure was not already in place:

Creating an Information Technology (IT) infrastructure was difficult. Unlike many PPS with hospital-based infrastructure, we didn't have anything when we began. In order to implement and measure and do all of the things we needed to do, IT platform was critical. We didn't even have computers at first. Sort of like a startup, we are building everything from the ground up. A lot of the selection process and data acquisition was difficult for us in terms of obtaining data from NYS. – **PPS key informant**

In the regional focus group setting, partners also agreed that they had more administrative difficulties in working with new entities rather than hospital-based PPS:

The NewCo¹² creates an administrative structure that is kind of an impediment to getting things done in our organization. – **Primary care Regional focus group participant**

Both large and small PPS recalled the immense resources required to get projects up and running. They described needing to reallocate staff from other departments, hire talent externally, or create new office spaces. Of the PPS that needed to build more infrastructure, they noted that it was even more challenging to do without capital funding. Performing Provider Systems also faced challenges in developing workflows for the reporting requirements and other DSRIP program responsibilities. These hurdles presented a significant early implementation challenge:

The biggest challenge I had from the get-go is that we were not very top heavy. We were a skeletal staff, and the reporting requirements were immense. We felt like we needed a significant amount of manpower. I visited some other PPS, and they had giant office spaces and huge armies of employees, which was intimidating. My initial reaction was that we just didn't have the infrastructure in place. – PPS key informant

We didn't have a lot of excess resources to set this up. A lot of our effort was inside of our organization. We doubled or tripled the size of our staff since the beginning of DSRIP. Trying to have the resources to organize this program and get it up and running was a very significant challenge. – PPS key informant

Regional focus group participants suggested that partners were impacted by these challenges at their level, and though they often felt that "the clients are getting the benefit, there's no doubt," they also felt that partners "have sometimes just been winging it" (community-based organization focus group). Other regional focus group participants specifically noted that the lack of structure from both the NYS DOH and the PPS created an initial confusion about the project and its direction:

There was zero structure. There was a group of projects and a bag of money. The initially 50-some PPS that were combined into the twenty-five...that we have now. And, each had to go out and figure out structure.

- Mental health and substance use Regional focus group participant

I would say, ha[d] the State taken some of the infrastructure things and create[d]...them [that would have been better than what actually happened]. Whether it was an EHR, connectivity consent form... Something. Give us some foundational things so that we didn't have to invent everything ourselves. Or, even just some guidance how the PPS were going to be structured so that each PPS was the same structure.

- Hospital Regional focus group participant

Many PPS identified that they had contributed to a challenging atmosphere because of their own temporal-related challenges with the DSRIP program:

One of the things that was a challenge was that award letters came out in May by the time DSRIP had already started. The evolving requirements were difficult and continue to be difficult. We weren't working on the program until halfway through the first year. – PPS key informant

We were behind in forming project groups and getting started on projects themselves, putting us behind on outcome measures that are [the] bread & butter of DSRIP. – PPS key informant

Other PPS reported that interim leadership delayed all aspects of startup, and that relying on consultants led to a lack of staffed PPS projects. Some PPS perceived that a lack of decision-making by original leadership teams resulted in delayed outcomes. Interim leadership was also identified as having been conservative in their approaches to project development, which created an additional early implementation challenge:

Many of our staff were conservative and hedging in the beginning because they weren't sure about how their decision-making would work once they left. – PPS key informant

OPERATIONS

This section presents stakeholder experiences regarding several of the DSRIP program operations, including project milestones, performance measures, partnerships, funds flow, PPS overlap, value based payment, data access and reporting, and workforce issues.

Project Milestones

Performance in the projects is measured on their milestones and progress to sustainability. Performing Provider Systems were required to submit quarterly reports to the Independent Assessor on the Domain 1 DSRIP Project Requirements Milestones and Metrics. Each project requirement included a target date, which could not exceed the prescribed speed and scale commitments from the application. The reports also included specific project unit level reporting and provider unit level reporting to demonstrate progress and success.

Overall, key informants and partners reported challenges in deciphering project milestone requirements and developing informed and meaningful targets. Performing Provider Systems also criticized continually changing requirements; these changes reverberated down to partners as they described devoting time and staffing to meet requirements, only to have them change again. Guidance on the projects was often changing and there was not a clear source of consistent information for the PPS. One PPS attributed the lack of clear guidance to what they perceived as NYS DOH's concurrent establishment of the DSRIP program alongside the PPS:

The challenge was just how quick everything was happening. The State was figuring out what their requirements were; we didn't get validation until after things were due. We worked around it all; we have made 100% of our milestones and goals that we set out to, but it really has come down to the State's timeliness (or lack thereof) on guidance. – **PPS key informant**

Other PPS reflected on the target setting process within the projects. Many of the PPS felt that they set targets unrealistically high, or that they were unaware of the commitments the work would require. For some PPS, they felt it was nonsensical to be backed into making commitments and then learn the ramifications of those decisions later:

Setting targets for the actively engaged was a very rigorous process we went through. The unknown factor was dangled in front of the PPS: If you go big, you will get a larger project valuation, but on the other end, you might not achieve those targets and may lose big. We went big, and I don't think at all that the return was there. It affected the project valuation by an incredibly small amount of money, and because of the emphasis placed on the actively engaged—primarily because it was the first Pay for Performance metric, I think—this has become viewed as a proxy for how we are doing on the whole. For this reason, we are constantly scrutinized for missing our targets. We've been doing a lot of good work, but all that anyone saw is that we missed [the targets]. — PPS key informant

It's maybe just the factor of time in terms of the State vetting the source of validation for information and even understanding and communicating whether we could actually do some of the things that they were requesting us to do. Some of the requests were unreasonable or impossible – **PPS key informant**

The target numbers set remain ongoing challenges as well. The targets were set so high that we didn't even have enough admissions to meet the numbers set up. There was a push from DOH to set high marks for networks, which became speed and scale commitments. It was after the numbers were handed in that it became clear what we were committing. Essentially, the way speed and scale commitments were set up was that we were instructed to give an informational forecast we weren't prepared to give yet. They said, "You're either in this pool or not..." Then, once you're in the pool, they said, "Let me explain what it means to you to be in this pool." "Let me tell you ramifications of the numbers you just gave us." On the provider commitment side, one of the project requirements is that we will have 7 emergency rooms involved, and we only have 6 hospitals. Those are examples of the nonsensical requirements. – **PPS key informant**

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Partners largely echoed those same frustrations. Partners felt targets were out of sync with their actual work on the ground, regardless of their provider type (e.g., primary care providers, hospitalists). Additionally, partners discussed how the timeliness of the outcome measures made it difficult to create or modify products and services. They suggested providing the measures ahead of project implementation, as well as continuous, timely feedback of their progress on a project:

[The outcome measures were delivered to us in a convoluted way and it would have been better to see the thirty-nine outcome measures from the outset]... Because they have a history of claims data they could give us some idea. 'Hey, you guys are way off on well-child visits' or whatever. It's not rocket science. So, I think what would have been more helpful is just start with the outcome measures and then I agree, in terms of well what, okay how are you going to impact these? I have to tell you some of them have nothing to do with a project. – Hospital Regional focus group participant

They gave all the hospitals a certain amount for every depression, anxiety, and SUD screen they did, and we could only get any payout for every physical that we did. So, we only do one of those a year, you do a depression screening every time someone [comes in], I mean the ridiculous unfairness of it all. Why were we not getting a payout for doing diabetes screening, and tobacco screening, and all the other things that they would want to be occurring in a preventive way from a primary care practice that's in a behavioral health center? So, we pushed and pushed and pushed on that and finally, they have changed that in this last quarter and we can count some of those other screenings that we're doing on a routine basis through our primary care practitioner. It's like who's setting the rules? The medical folks. And, it takes two seconds to fill out a screening tool and it takes an hour to do a full exam. – Mental health and substance use Regional focus group participant

PPS spoke about the challenge of managing attributions in their project development. Attributions are Medicaid members who were assigned to each PPS, based on a NYS DOH algorithm. Key informants detailed how they lacked the necessary data to make accurate attribution determinations per project. Many PPS had made changes from their application to the actual project launch, but they regretted being stuck with inaccurate or unreachable service targets:

When we started the application phase, we were focusing heavily on a [10] county catchment area. As we went further along into the application period, we were approved for a five-county region, which was still a good amount of coverage geographically. Because everything we had been looking at for our application was nine or 10 counties in terms of patient/provider engagement and community needs, not being able to make changes to that after our size changed drastically continues to be a huge challenge. The number of providers we have committed to and patient numbers are totally wrong and unable to be changed. This has proved to be challenging. Our performance measures are still based on that larger area of counties.

- PPS key informant

Everybody was getting recalculated attributions for quite some time, so you didn't even know who you were managing and if our projects even matched up with our attribution – PPS key informant

Performance Measures

Performance measures are separate from project milestones. Project milestones are centered around Domain 1 or the PPS-led projects. Performance, on the other hand, is measured during the DSRIP program measurement years, and impacts future Pay for Performance in upcoming demonstration years. In Demonstration Year 2, clinical improvement Pay for Performance measures began (Domain 3). Also, in Demonstration Year 2, data collection for Domain 2 Pay for Performance measures began, which is to be followed up with Domain 2 Pay for Performance measurement in Demonstration Year 4. Overall, more dollars will shift from Payment for Reporting (P4R) to Payment for Performance (P4P), as the DSRIP program continues.

Performing Provider Systems reported being unclear as to where to put their efforts. After concentrating on setting up the projects for the first two years, some PPS key informants described that they had to change their focus to performance measures:

We spent the first 18 months of DSRIP working on the projects and the milestones required by them, and now we've made what we fondly refer to as the pivot, where those projects are operational and being managed, but we are almost doing wholly separate work on the specific goals. We had a DSRIP phase 1 and a phase 2, and we've had to flex our resources between the two. A lot of the early milestones had nothing to do with the performance measures, but now we are working on the performance measures. – PPS key informant

There's been a tremendous focus on getting project requirements met, but what we are finding is that it doesn't necessarily translate to performance on outcome measures unless other innovative things are done.

- PPS key informant

Other PPS felt that they could not move the majority of their efforts toward performance-related measures because they were still focused on project workflows:

Part of my concern with that is that we are moving into Pay for Performance, but we are spending a lot of time in our practices working with EHRs¹³ and changing workflows when really, we have to be focused on the outcome or performance measures. With so much of the focus now on performance, we are still spending a lot of time trying to build the EHR screen and the workflows around getting this done. My concern is that we aren't spending enough time on more of the performance-related requirements. – **PPS key informant**

Many PPS described a tension between focusing on performance measures versus their project milestones. They described that, over time, they felt that projects were distracting them from meeting their performance measures. They perceived that they needed to shift their thinking to be successful in the later DSRIP program years when more payment would be focused on performance. They also reported that the projects were distracting them from making real transformational changes in the care of patients:

I woke up one day and realized we weren't providing patient care. We did an excellent job along the way checking off the boxes on our projects, but I can't say whether that has made a change for patients. We've been extremely successful wasting dollars on the projects. We've gotten the marks for getting the boxes all ticked. Once you get out there bringing these community neighborhoods together, you realize the transformation is not about specific projects. It's about bringing people together, determining what the goals and objectives of the referral relationships [are], and connecting people with each other through IT systems in some form or fashion. Care management from the simplest form of it to the most complicated is the key to the whole thing, but it's care management from people who are not organizationally related except through referral relationships. That's where transformation takes place. The biggest problem with the projects is that they have interfered with the meaningful transformation. Our challenge has been, "How do we do something meaningful while checking the boxes?" We have had some success doing that, but all the boxes we've had to tick have gotten in the way, and we could have done more, faster, at less cost if we didn't have to do that other stuff. – PPS key informant

Honestly, sometimes I feel the projects have become a bit of a distraction, and that as we pull our networks together... The collaboration we have seen among our partners in the last year or so has really been gratifying and amazing, but if we were able to focus on the activities with our partners that we feel will have the biggest impact and decrease the focus on some of the specific requirements of those projects, I think we could probably advance this thing better and faster. – PPS key informant

Some regional focus group participants echoed that view, but emphasized that their project workflows were also impacted by a lack of funding, despite making big improvements to scores:

We're involved in the integrated project too and we've virtually received nothing. Except for the capital dollars, which were nice, but we're still nine months away from really integrating care... I think some of those infrastructure issues that have hampered our participation, I think of this junction as they move into

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performance-based payment is just leaving us behind, and the medical folks are going to move forward. Because we don't have that capacity when interestingly the biggest effect on the scores are going to occur by our participation. – Mental health and substance use Regional focus group participant

Some of the issues that impacted partner performance or participation were related to waiver requests. In some cases, waivers were identified as a source of project facilitation:

In year 2 of the project, the PPS had only one community-based clinic that facilitated the treatment of Opioid use diagnosed patients. There were 4 Buprenorphine waivered physicians eligible to treat them. In this current year, the PPS operates in three clinics; with nine waivered physicians. This is tremendous progress for the PPS – Partner survey respondent

Other PPS reported struggles related to waiver requests that were pending or had been rejected and that they had impacted their ability to meet project milestones. For example, partners responded that they had been left waiting on regulatory waiver requests for periods up to one year and that while they wanted to do more work towards meeting performance measures, they were unable to make the kind of service changes they wanted to make, such as co-location or telehealth.

Partnerships

Performing Provider Systems had a wide range of experiences involving partners to meet the demands and complexities of DSRIP transformation. Some PPS had difficulty including their largest partners in the transformation efforts due to the partners' lack of trust that involvement would help them meet their organizational and financial goals:

One of our challenges is that we have several large and influential partners involved in our PPS. As we get along to implementing our projects, we have very influential partners who are making decisions on whether to engage in projects based on whether the money they'd get from DSRIP is equal or more than the effort they will put into the work. It's a transformational effort, and the DSRIP dollars are a bridge to get them to a [value based payment] world. They aren't buying into the system. These partners are looking very short-term to figure out next quarter gains, and if they spend more than they make, they won't do the activity. That has been a huge challenge for us, that we have very large influential partners, including our member partners, who are not playing in the sandbox well. – PPS key informant

With great effort, many PPS were starting to see a change in partnerships and the partners' embrace of the DSRIP program:

...People were skeptical. We had to establish a culture for this. Getting acceptance and buy-in are what we were trying to get done. In terms of being the lead agency in this, there was an institutional challenge in that respect to get clinical leadership. There were priorities. "It's a great opportunity, but how do we embrace and get by as the largest partner in this PPS?" Now, things are fully embraced, and people are well engaged and supportive of what we are trying to get done. Culturally, the shift that was required of the lead partners and stakeholders was not insignificant. – PPS key informant

New Partnerships with Community-Based Organizations

Key informants pointed to their new work with community-based organizations as fundamental to their success. They stated that the value placed on the work of the community-based organizations had generated positive feedback and that overall communication between the clinical networks and the community-based organizations had improved:

The dedication of our community-based organizations and the commitment from these partners has been incredible. – **PPS key informant**

We had a lot of pressure to give money to tier 114, and we even got remediation on the mid-point assessment because we are working with the [community-based organizations] who need help in capacity building. It takes time. We finally are seeing them blossom. Without any structure or framework, we held back to do what we thought we needed to do for capacity building. We still have the highest distribution to [community-based organizations] and in general. We've also done some of the most extensive outreach of all PPS. This is the beginning of doing transformational work in developing a community practice where we are sharing goals and ways of doing care. – PPS key informant

For us, I was super excited. I'm finding that we're working with different agencies in our community in different ways, which is an absolute plus. I think in some ways DSRIP has helped with reducing the height of our silos with some of the integration pieces that are out there. – Mental health and substance use Regional focus group participant

Partners from community-based organizations had both positive and negative assessments of their work with PPS. Many were pleased with the new workforce and expanded project scope they had been able to develop with DSRIP program dollars. They expressed increased service provision in some of their toughest service areas and gratitude to being able to expand the scope of their health care workforce. Some of the success stories included work from the patient activation measure project (2.d.i), yet one community-based organization partner also described how the two PPS they were working with were taking different approaches to the survey:

Some PPS still aren't sure that coaching can be done effectively outside of a health care environment. [PPS A] is more convinced it can. And, communities are really important. [PPS B] is still not really sure that isn't just a care coordination role. – Community-based organization Regional focus group participant

Community-based organizations struggled with figuring out how their organization fits in a DSRIP program world. For example, the exposure to risk was a very new endeavor for many of them:

And so, when, when the [PPS] approached us, I think that the idea was exciting to be a part of. I think we're a small, private nonprofit so we have the flexibility to be able to innovate and do some new things. I know some of the initial bumps in the road and to be honest, that we still face today, is the amount of risk that this endeavor carries. We had to ramp up our HIPAA and our compliance end of things and it's still a work in progress. That was a major investment that we made on our own. We didn't write a funding request for anything from the [PPS]. So there's been a lot of investment, to get to us to this place. They really put us on the hook for everything. I mean, God forbid something were to happen. We are a three or four-million-dollar organization. I mean, everything can get wiped out in a heartbeat. Now, the payoff on our end is obviously that we can create new jobs that we can grow and expand our mission beyond what it ever had been before. And, it gives us a place at the table that we have never been at before too. So, there is some payoff to that risk. Hopefully, that continues. – Community-based organization Regional focus group participant

Many community-based organizations felt that the PPS did not understand their full capacities and that they were not integrated fully into the DSRIP program. However, they shared this could shift in the future:

I believe the PPS don't truly understand the capabilities of all of the CBOs and as a result, have not integrated patient care under DSRIP as effectively as possible. With more education industry wide and across the health care spectrum, we can better integrate total patient care and effectively impact population health and the vulnerable Medicaid population. – Partner survey respondent

Community-based organizations also noted that they needed more funds and resources to accomplish the types of tasks being requested of them by the DSRIP program and the PPS. In addition to funding, CBOs requested more capacity building, inclusion in the discharge process, and health care related infrastructure development (e.g., electronic health record systems).

Funds Flow

The PPS informants reflected on the amount of time it took them to distribute funds to their partners. Many PPS were successful in quickly moving the funds out to partners, and felt they were rewarded for those efforts:

One of our successes is that we've received 97% of the available funds to date. We are a small, lean-running PPS, so we don't put a lot of money into building capital. More than 85% is put back into our partners, and all of that has gone to our partners successfully. We are very transparent with our funds flow and how it works and how funds cycle back to them. We try to maximize all available funds, and it's been a great success. The implementation funds came in, and we worked with partners to develop our funds flow. Now we are working on Pay for Performance. We are trying to make this PPS successful. -PPS key informant

We were able to get money quickly out to partners, which helped us out in the long run. We created educational documents and webinars for the partners to teach them why we were doing things in a certain manner. It allowed us to have an opportunity to flow our funds quickly, and the required documentation and information was submitted timely and accurately, so it made our jobs easier when these partners were on board and up to date. We knew exactly what we needed, so our partners were on the ball in terms of providing things to us. – PPS key informant

Partners' experiences with funding differed based upon the level of PPS infrastructure that existed pre-DSRIP program. Partners associated with new entities without an established infrastructure struggled with delays and lapses in the flow of funds. Though, partners also expressed they preferred the direct payment model of the new entities, rather than the hospital or health-systems based PPS, which they described as having more indirect payment models.

The PPS described the reasons for the conservative approach that they took to dispensing funds and the hurdles they faced from the NYS DOH and their partners:

We had challenges with funds flow. This whole idea of getting funds out to partners as quickly as we can, but having some accountability for what they do with those funds without having mature reporting structures, expectations, and deliverables... It concerns us to this day. We were trying to be very conservative, cautious, and accountable in what we were doing, but we were also trying to meet the demand that our state and our partners had in trying to get funds out the door. – PPS key informant

Funds flow was difficult for us at the beginning. We had to flow dollars to organizations that would make meaningful changes, while also flowing dollars to the [community-based organizations]. In addition, we have a 5% cap on [community-based organizations] for safety net providers. We got called out on the funds we were flowing, and we had to justify why funds weren't flowing to the [community-based organizations], but it was difficult to figure out how to do it in a meaningful way. – PPS key informant

Transformation happens on the speed of trust. The logistics of working out domain 1¹⁵ projects were significant. For example, issues were: (a) tying the goals of DSRIP to implementation dollars with our partners; (b) classifying our partners (and not always having the State classify them in the same way); and (c) figuring out a contractual structure, which took us a long time. We took the contracting process very seriously.

– PPS key informant

The PPS informants perceived that the Independent Assessor's reports did not accurately reflect the progress they had made in pushing out the funds, especially to community-based organizations:

I'm proud of that and the fact that we've done a really good job as financial stewards of the funds we've received. The pushback, then, that none of the money was flowing down to the [community-based organizations], much of that was an artifact of how we had to report. We spent a lot of money that was

going to care providers, and it went to the hospitals first, but a great majority of it was going to people providing flow. It was a categorization problem as well as a reporting problem. We've started to switch the way we report so that it's more of an accurate report of the way we spend. – **PPS key informant**

Partners' experiences with funds-flow overall were challenging. A number of partners responded that the 5% limitation¹⁶ to non-safety net providers versus the 95% to safety net providers had alienated key partners that were fundamental to the DSRIP program's success. One partner described the policy as "misguided":

We are a private practice in a rural county and see about 17% Medicaid but do not meet the criteria as a safety net provider. The resource sharing seems too heavily weighted towards safety net providers who are not typically as efficient or as nimble in the market place as we have to be in private practice.

- Partner survey respondent

Overall, many partners reported a desire to see the NYS DOH monitor whether funds flow was indeed making its way to community-based organizations. A major concern from partners was whether funds were being adequately distributed to non-hospital participants. This was relevant to community-based organizations and clinical practitioners:

The State should more closely monitor the funds flow between PPS's and the community-based partners. The community partners are engaged but are not sufficiently compensated for their time/effort. In addition, in some PPS, community partners are not given the opportunity to participate in project development. The projects are more clinical focused, with little attention paid to the social determinants of health that also need to be addressed in order to improve overall health outcomes. – Partner survey respondent

Unquestionably to get appropriate and effective funding to CBOs, CMS and the State will have to "carve out" real funds for CBOs to implement projects. Since the CBOS have had so little opportunity within DSRIP to demonstrate what their programs can do—many of which may not fit into the "siloed" official DSRIP projects but do bring down hospital use—they will be in an even worse position for VBP.

- Partner survey respondent

During this change to value-based care, the DSRIP funds primarily go to the hospitals making it very difficult to remain in private practice. - Partner survey respondent

Alternately, hospitals reported that the funds flow were not significant enough to make meaningful change to the health care system:

The funds flow to partners, especially hospitals, has not been significant enough to propel change that will transform the way we provide services. Rather, DY 0-2 has felt like an exercise in "checking boxes" to meet goals on paper. Until VBP is here across all payers hospitals still need to operate within the FFS system. Until funds flow to hospitals to truly offset the cost of a volume decrease of 25%, there won't be incentive to change. – Partner survey respondent

I would increase PPS reimbursement rates for hospital partners. Prior to DY3 hospital systems were reimbursed for the coordination of services for Medicaid discharges; however, current funds flow models reimburse hospital systems simply for a report of the Medicaid discharges monthly.

- Partner survey respondent

Partners also reported challenges with delays related to funding and other contractual hurdles to their work with the PPS. For example:

¹⁶ This designation is described in the DSRIP program requirements outlined by the MRT Waiver Amendment STC. Relevant excerpts include: (1) "DSRIP funds provide incentive payments to reward safety net providers when they undertake projects designed to transform the systems of care that support Medicaid beneficiaries and low income uninsured." And (2) "non-qualifying providers can participate in Performing Provider Systems. However, non-qualifying providers are eligible to receive DSRIP payments totaling no more than 5% of a project's total valuation."

[PPS Name] has presented its contracts to us both years at least six months late creating tremendous cash flow problems for us. In fact, this year's contract just arrived last week; they changed key provisions without even asking us... - Partner survey respondent

My organization still does not have a contract for this year...so we have no funds flow. I know how much we've earned and I know how much we've gotten paid and there's a very big discrepancy between the two because the payment doesn't happen until there's a contract and of course that's way above my pay level, but that concerns me. - Primary care focus group respondent

PPS Overlap

There were a wide range of unanticipated issues for PPS with overlapping in service areas. A slight majority (33) of New York State's 62 counties have only one PPS (53.2%). The remainder of the 29 counties, however, have an overlap of between two and six PPS entities.¹⁷ This means that, in areas where there is overlap, partners have options to work with all or some of the PPS in projects. Both the PPS and the partners reported unexpected challenges due to this overlap. Most of these issues centered on work with partners, but other issues concerned patient attribution.

The PPS reported that partners could be frustrated with conflicting interpretations of DSRIP program and NYS DOH rules by the different PPS. For example, a partner in two different PPS may receive conflicting guidance on how to handle a rule change or project guidance. Some PPS felt they had overcome these challenges by collaborating with other PPS to develop similar reporting requirements and alignment of other procedures. Still, they felt there should be a better way to serve the partners, so they are not tasked with different rules or policies:

We've gotten challenges with providers in two or three of our sister PPS, but on the other hand, we've placed more emphasis on collaborating to try to overcome those challenges with an "all must rise" philosophy. The medical directors have tried to come up with similar sets of reports that would be easier for our participating partners to fill out one set of forms, rather than multiple different sets. They've really worked hard to try to coordinate the efforts, and we did one Community Needs Assessment for the entire region. Nobody in the entire region was disputing the needs of the Community Needs Assessment, and we've done a great amount of work on behavioral health together. It took so much time and resources and dollars to coordinate to make it easier for the providers so that they didn't have to work with multiple PPS. That gets back to the ill design of this program. There should not have been overlap on projects. In hindsight, maybe it sounded wonderful when they were designing it, but with all of this effort to work together, things are still not operating at 100%; the providers and partners are getting different things from each PPS. A lot of providers were doing multiple surveys on the same topics, and we couldn't coordinate fast enough. There has to be a better way next time. - PPS key informant

Overall, working with multiple PPS was described as frustrating, especially if one contracted PPS was more favorable to work with than another. Pivoting back to the PPS perspective, the stakeholders countered that they had not built their service models to be collaborative from the start; thus, they found overlap difficult:

These partners want more alignment across PPS so they aren't doing things three different ways for three different PPS. It's hard for us to change course later on. We've had to collaborate with partners after the fact, which has been immensely challenging. It would have made sense not to have 10 PPS in the NYC area,

² PPS = 21 counties (33.87%)

³ PPS = 4 counties (6.45%) 4 PPS = 2 counties (3.23%)

⁵ PPS = 1 county (1.61%)

⁶ PPS = 1 county (1.61%)

but at this point, it is what it is. Some partners complete four different surveys for four different PPS. - PPS key informant

Another PPS explained that the environment at the point of project development did not encourage collaboration. Collaboration only occurred after attribution. While they felt they had an excellent, consultative relationship with their overlapping PPS, they found that there were unintentional outcomes of their overlap:

For example, one PPS might pay more for the same activity, so the providers may not sign up for it with us Agencies can only stretch so far and participate in so much, so that is a reality. [community-based organizations] have only so much flexibility...You could have a [community-based organization] trying to wrap their heads around 15 or 20 of these DSRIP projects let alone all the rest of the information. For the partners, that's a lot to put on their plate. – **PPS key informant**

In New York City, many PPS reflected on the overlapping nature of their projects and their attributions and tried to align their projects together:

We may be affecting outcomes of patients that are attributed to a different PPS than our own. How well our outcomes improve are not only related to our own efforts, but to the efforts of the other PPS downstate, which made it a benefit for us to align projects together. – PPS key informant

In New York City, there are seven PPS, and we overlap with a lot of them. There was some overlap on the projects and a lot of overlap with providers. A lot of discussions needed to happen to iron out who would participate in what PPS and what project. – PPS key informant

Finally, some PPS also felt that they had designed innovative solutions to the overlapping PPS issue and had managed to bring competitors together in real ways:

We deal with a lot of overlapping providers, and we had to discuss early on as to how to divide and conquer the work. It was a challenge, but we had some elegant solutions to that. The PCPs only had one PPS to work [with] within this agreement, which was really helpful for us in the end. Behavioral health providers are involved in both PPS and are committed to shared outcomes and shared goals. It is a real commitment regionally. We had competing hospital systems that now have to work together. The outcomes of DSRIP have trumped their own competitive natures. – PPS key informant

Value Based Payment

Throughout Demonstration Years 0-2, partners and PPS were beginning to have conversations around what value based payment would entail. Almost all the PPS reported major preparatory activities for the shift to value based payment with their partners. These activities included building educational tools for primary care, behavioral health, and community-based partners. Some PPS described shifting the content of their main annual meeting from project updates to learning collaboratives on value based payments and outcomes. Many PPS had launched Value Based Payment surveys and listening tours with their partners. Each PPS was starting from a different point, with some partners already having value based payment-equipped models and others with no value based payment-equipped partners. Also important to this transition, was what the PPS described as bringing data to the forefront. In that process, PPS realized that some partners were having more difficulty shifting to a value based payment world:

We've had preliminary conversations with our [community-based organizations], who have not moved quickly. We are reimbursed 100% fee for service, so I think we are taking a little bit of time to evaluate prior to the shift. Now we have data and we have a sense of our quality performance, so now we can think about how we propose to achieve what we set out to. The pivot really focused on diverting attention from projects to trying to achieve metrics. – **PPS key informant**

New York State came with very scripted milestones that forced people with no experience in [value based

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payment] to jump into the deep end with one or two swimming lessons. The sophistication and risk associated with the milestones that NYS floated out there really overwhelmed our partners. Our partners didn't feel like they could go from zero to 100. They were really put off by the whole message when it came to obtaining their data, doing the assessment, and learning what could be shared and what couldn't. The State couldn't answer attribution questions and concerns with data and outcomes. – PPS key informant

Community-based organizations were also concerned about preparing for value based payments and often felt like the value based payment boot camps from the PPS and NYS DOH and other meetings were not applicable to them. Still, they want to find a way to fit into the new funding paradigm:

It's been alluded to that we can provide what we can do in this arena and then beyond DSRIP, either through DSRIP or beyond DSRIP, we'll be able to show our value. And then be able to sustain our programming, our employees, that kind of things. Through some kind of contractual services that we're able to offer to the providers, the hospitals, and that kind of thing. But that's still yet to be seen and that's again part of the risk we are taking. I would hate at the end of 2020 to say "all right we're done" and wrap it up. Because there's been such great impact, and so much that we've been able to be a part of but we really do have to figure that out. We have to figure out that part of the equation. – Community-based organization Regional focus group participant

Within the framework of value based payments, many PPS described tensions that they were facing before the full transition to Pay for Performance. The PPS and their partners noted that as they had early successes in meeting performance measures like avoidable visits, they were losing financially, as their hospital admissions went down:

There's been an awful lot of emphasis in DSRIP on financial incentives, [value based payment], and primary care. There's been a lot of challenge in working with our more institutional partners who are facing severe local competition, and the units of care are measured by inpatient days. As we achieve our DSRIP goals, reducing those inpatient days with no substitute for that, we are running into trouble with our own people here. – PPS key informant

There has been a constant tension in this program that we are moving to [value based payment], because the more we reduce avoidable visits, the less we get paid. If we do our job and have success, we lose pay. That doesn't mean we aren't moving to [value based payment]. This group is really tuned into that. It makes reimbursement precarious in some respects, though. – PPS key informant

We went from 24% to 13% of emergency department patients being admitted. It has had an impact on us in terms of reimbursements. There is a disconnect at the State level because the money hasn't caught up to what the State needs us to do (i.e., reduce hospital visits). They should be giving grants to those who are making the change. We are losing money by implementing. – **PPS key informant**

When asked about the measurable changes that the DSRIP program had made to overall health care transformation, many PPS pointed towards value based payments:

I can say as a genuine observer of the health care system locally that it has changed. The expectation of the providers is one of the biggest things I've seen change. DSRIP was forming implementation plans in the beginning, and there were theories about what could be done – back then, [value based payment] was a pipe dream. No one thought the movement away from fee-for-service would be pursued as rapidly as it is today. It might be immeasurable today, but the expectation of the migration toward [value based payment] has moved from a theory to a reality. It's not if, but when, it will happen. How are we being positioned for this, and how can the PPS support us? [value based payment] is not fake news. It genuinely grips the migration. It's a cultural shift and the expectations of the providers within the network that allude to a higher quality of care. - PPS key informant

In the partner survey, discussed more extensively below, the partners were surveyed about value based payment. The results generally reflected the PPS had made great efforts to educate their partners. At a statewide level, 82% of partners

characterized themselves as "very knowledgeable" (23%) or "somewhat knowledgeable" (59%) about value based payments. Pharmacy and hospice/palliative care workers rated themselves as the most knowledgeable, and community-based organizations and county government (e.g., Albany County Department of Health)¹⁸ rated themselves as the least knowledgeable. However, regardless of organization type, 84% of respondents said they needed more resources or knowledge for the shift to value based payments.

Three-quarters of respondents (74%) said their organizations had made changes to prepare for value based payment. Hospitals were the most likely to have made changes, followed by hospice/palliative care groups, nursing homes and rehabilitation centers, and practitioners; case management/health home and county government respondents were the least likely to report changes in preparation for value based payment.

DSRIP Data: Accessing, Measuring, and Reporting Data across Stakeholders

Data access and sharing was a significant issue for PPS and partners. PPS and partners were frustrated by difficulties accessing data provided by NYS DOH, and PPS were not always able to access the data their partners were collecting. Community-based organizations had a particularly difficult time in obtaining access to data.

Accessing and Sharing Data from NYS DOH

Performing Provider Systems did not have full access to NYS DOH e-data during Demonstration Years 0-2, which made it difficult to obtain the information they needed to develop projects and track progress. There were delays in gaining access to the full spectrum of claims data and, of course, claims data are always reported with a lag. PPS felt that New York State could have done more in the pre-DSRIP stage to build useable data systems and data sharing regulations:

The most useful thing we've gotten from the State is Salient's data. Of note, we have only gotten it recently. Really in the last couple of months, we've been able to do some analysis from Salient with the data that's helping us to understand what we need to do. Before, we didn't know how to get this data or this understanding. It's taken a while, but we now have a tool that is allowing us to really think about what the issues are and how we address them. We are just now understanding what the obstacles are to achieving some of the goals. – PPS key informant

The other source of data is the States' claims data. There is a lag in it, but there is a lot of potential utility in it. We got approved to receive the data almost a year ago, and we started receiving it in January. It's in this RAM environment where we basically can't do anything to it. The State has the MAPP performance dashboard that they created. We can download data from there, and we can use it internally, but because of the State's restrictions, it is not useful. Between the structure of the data and the restrictions of sharing data, it's virtually unusable. – **PPS key informant**

The PPS also noted that it was difficult to use the data to target patients who were not assigned to a primary care provider:

With patients who are not assigned to a PCP or MCO, it is difficult for us to understand which provider to focus on to help move on some of the metrics. They applaud themselves for their improvements on data, but it's still not at the level for us to be able to use it wisely in an actionable way. – PPS key informant

We wish we could share the data from New York State. What is most useful that they provided to us was the

CPA¹⁹ report they started doing early on and some of the network overview roll-ups that they did. Because that data from the State is already so old, it's not necessarily actionable for us. It was useful to kind of understand what partners might be some of the best to pursue for closing certain gaps. Because 80% of our patients are within certain areas, we are able to touch a majority of them through partner associations. Many other PPS have discovered that the biggest populations are also some of the hardest to reach because they don't have assigned Medicaid PCPs. They aren't coming in for regular care within a PCP site. - PPS key informant

The PPS believed that NYS DOH should have developed data systems to support them. Eventually, some PPS found ways to obtain data for managing their projects and calculating performance measures by bypassing State data systems and obtaining data from their partners. One PPS described that, after two years, they were finally not relying on data from NYS DOH:

From a reporting perspective, the partners understand the issues, and we are working on not over-collecting, but instead getting the right information. We are just now launching our partner data processes. From a data collection perspective for managing our clinical outcomes, we are finally in a position where we are not relying on the State's data. We have gotten data from our two lead hospital systems that are feeding pre-adjudicated claims. We also are connected to the RHIO.²⁰ Our next step is working with the FQHCs to collect data from them. We are also looking to get behavioral health data, too.

- PPS key informant

Once State data systems were operational, frustration remained regarding the six-month lag in reporting. Without more current data, PPS could not respond effectively to what the data showed.

The State provided data is helpful, but it needs to be more timely The data we currently get from the State right now used to be over a year old, but the newest data we got is only seven months old. It's not necessarily actionable in any way to us, but it's getting better to look at trends. There is still a lot of cleanups that the State needs to do. – PPS key informant

Though many reported that the data from the NYS DOH were not actionable due to its lag, they still wished they had permission to share the data from the New York State data repositories with partners. All provider types shared concerns about data access. Some suggested building off of other State-level shared data systems, so that patient data could be readily used to build programs or provide care:

The State knows who the super-utilizers are, and they've provided PPS with the patient data. I've been saying it for three years, if they just provide the patient data to us, we could tell you exactly how we can impact this, and we probably could have been doing it two years sooner. And, we are maybe finally just starting to get there now but it's been one of my biggest frustrations, is tell us. We've got partner agreements, we've got ... agreements, there's a trusting relationship here, tell us who these people are and we can tell you how we impact them. – Mental health and substance use Regional focus group participant

Data sharing and confidentiality regulations were also viewed as problematic. One PPS described permission issues as "handcuffs":

The claims data from those sources helps us target areas of opportunity. However, we can't share the claims data with any people downstream. It helps us get large trends, and we can create dashboards to figure out areas in which certain target patients are. We use it to target areas, and when we are able to finally share that information (and many of our physicians are asking for it repeatedly and frequently), they will be ready to use the information to close some of these care gaps that will make the project successful.

- PPS key informant

What we attempted to do to get around [patient privacy regulations] was to use claims data to identify which providers had touched those patients so that we could send the information to those providers. The State has now said that we can't put the data in that RAM environment and use it externally. Even though we aren't taking any of the claims data outside of that environment, we are only taking the data we put into it and the data we created that cannot be put into the state's file—they said it's contaminated now, and that we are not allowed to share it. They give us access, but then put handcuffs on so we aren't allowed to share it. – PPS key informant

Other PPS reported that, despite their progress in gathering clinical data, they were alarmed that they still did not have the claims data that they need for the Pay for Performance measures. As one key informant reported:

We may be getting the clinical data, but there are certain P4P measures that are claims data-driven, and without that data, we can't do anything. We just don't have any of those capabilities. Considering we are in measurement year four, the amount of dollars tied to these metrics is alarming because we have no way of measuring them. – PPS key informant

So, when you're talking about trying to build a robust patient record in one location that's reliable there has to be some sort of standardization and mutual agreements on what information is going to be pushed out. So that a provider goes in and is going to expect that record is complete and robust is finding what they need and count on that ... because right now that does not exist. – **PPS key informant**

Accessing Data from Partners and Other Systems

Many PPS reported that they had substantial issues with accessing the partner data that they needed to oversee projects. They often needed to build their own data systems from scratch, and data sharing remained a challenge in some areas.

The majority of PPS reported that they built dashboards or other platforms, which were extremely beneficial. While it was a challenge in the beginning, by the time of the interviews in Demonstration Year 3, most of the PPS had data systems that collected most of what they needed.

The PPS with resource needs had to hire data analysts and managers in order to make progress. Other PPS quickly realized that they would not be able to make actionable changes in a Pay for Performance setting without real-time data. To solve that problem, PPS used their dashboards to share progress on metrics:

Our work projects on primary care access require information on who has appointments and when, and this needs to be updated every day. Real-time information, as it relates to most of the 43 Pay for Performance measures, is critically important. We have been able to take that data to evolve dashboards where users can look up their status on any given day and respond. PCP practices can respond. You can only do that with real-time information—not with claims data. For Pay for Performance, we've had to rely on new systems for this. — PPS key informant

While partners appreciated the development of the data systems and reporting infrastructure, they saw the further need for operational information technology and actionable data. They reported that there are many data systems that are not integrated, making reporting difficult:

Operational IT is population health; everybody's trying to work on it right now with different systems. Some are going to work. Some aren't, but when you're in one system you can pull up that information, but if you're trying to get information from a substance abuse provider, mental health provider, community organization, primary care, hospital, all of that and look at what needs to be done for a patient to see where they went and get a report on that, you need to have operational information. And we're not there yet. – **Primary care Regional focus group participant**

They told us we had to design proxy measures, which is what you are talking about and our data. We have

dysfunctional data systems because we have nineteen different EHRs.²¹ So, it's even hard for us to get that stuff. **– Hospital Regional focus group participant**

Another PPS noted that they needed data buy-in from insurers:

We are building up a data warehouse that is based on the hospital hub partners. We are still struggling to get claims data from our insurers. What we really need, ultimately, is the fuller picture we can only get from claims data. We are working with the insurers to do that. – PPS key informant

Qualified Entities

At the inauguration of the DSRIP program, each PPS had access to a Regional Health Information Organization (RHIO), now known as Qualified Entities (QEs). These QEs are typically groups of organizations within a geographic area that enable electronic sharing of health-related information. There are eight QEs across NYS. The PPS generally described challenges with utilizing the QEs. The PPS requested more direction from the NYS DOH to hold the QEs accountable for helping the PPS.

While the NYS DOH's vision was idealistically on target, it did not support the reality of clinical data exchanges across the State, according to the PPS. For example, one stakeholder described their region's QE as not-functional:

Because [Redacted] QE is not operational IT, [Redacted] QE is information that sits there and if you have time to look through thousands of pages you can find maybe what you want - Primary care Regional focus group participant

The PPS described the challenges in getting their partners to connect to the QE. They often noted that the QEs were not responsive to partner needs in the most optimal way, due to contracting and budgeting issues:

It's not one single QE. There are pilot programs going on across the State. They're doing the best they can with the uncertainty about the demands being placed upon them. We would prefer them to focus on just DSRIP goals rather than some other interests that are out there for using that data. For most of us, we just have a near focus for DSRIP. We just want partners to be connected and data to be exchanged.

- PPS key informant

There are QE connectivity requirements prescribed by the DOH, but they require PPS to engage as a vendor. This has not been encouraged by DOH. The QE has been slow in responding to our area and understanding what our needs are. Even though the QEs have data from the State, they are still playing with the rules from the State about how to utilize the claims data. A few QEs have the claims data, but they're not able to do anything with it. That's been true for longer than a year. Our QE has had minimal play in getting us to do the things we need to do. – PPS key informant

Workforce Issues

PPS noted successes in workforce development. The PPS relayed that they had hired hundreds of people and had trained thousands in their efforts to get the PPS and its projects operational.

One success was training health workers in care coordination, motivational interviewing, and LGBTQ health care competency. A PPS reported that recruiting and training emergency department staff had significantly reduced preventable admissions. Others noted that they successfully brought their workforce into historically underserved areas; one respondent said the changes that were happening in their community through workforce deployed through the projects were "mindboggling".

Some PPS described how unrealistic their own workforce targets and milestones were to achieve:

These initial overly optimistic [workforce] targets were not able to be revised, so consequently, we are faced with living with unrealistically high targets and a significant loss of funding. The workforce initiative is very central to the goals of DSRIP, but to tell our board we aren't getting any funding for workforce since it is all or nothing, is really difficult. There are a bunch of milestones under the workforce initiative, and let's say you make four out of five milestones; you won't receive any funding. It's very rigidly interpreted.

- PPS key informant interview

Partners shared a mixed review of the workforce development initiative. On one hand, the PPS acknowledged that community partners had the ability to recruit, mobilize, and deploy populations that the PPS did not access. However, other partners were more skeptical and saw no change in workforce hiring or training.

INTERNAL AND EXTERNAL SUPPORT SYSTEMS AND ACCOUNTABILITY STRUCTURES

This section presents the findings of the operations of the PPS internal and external support systems.²² Results are organized into two categories: Committees and Governance Structure and Technical Assistance and Oversight from NYS and its DSRIP Partners.

Committees and Governance Structure

The PPS overwhelmingly found their governance and committee structure from startup to current status as beneficial. While some committees were stronger and more successful than others, the feedback for the current governance structure from the PPS' perspectives was largely positive. A few reported changes to the committee structure over time, to foster continual improvement:

We had quarterly town hall meetings, which now have been moved to a less frequent basis, but these included partners from all types across the network. The discussions that occur within the clinical committee have transitioned as well. It used to be very project-related, and now it's related to discussing clinical implementation and the strategies related to that. It's now a forum for input from members in terms of increasing approval for what we are doing and extending projects to other partners to support our network.

- PPS key informant

The IT committee, compliance, and clinical committees meet on an as-needed basis. People have limited time, and committee meetings were taking up too much time. They meet now when they need to, and the governing body takes the lead on these issues. On the IT and data side, our strategy has changed a bit; for a smaller PPS, we leverage systems that exist rather than standing up new IT technology. It's all about efficiency. Rather than create redundant meetings or IT structures, we are trying to be more efficient.

- PPS key informant

We value a lot of the feedback that [committees] provide to us. For example, they know how to create a registry within EHR. There's always someone there to say whether it will or won't work. There is a high level of conceptual thinking that happens, and then there is also feedback about what happens daily at a given level. – PPS key informant

A small number of PPS (three) reported more hostile relationships with committees at the beginning of the DSRIP program, but reported making structural changes to create better working relationships among the parties.

Technical Assistance and Oversight from NYS DOH and its DSRIP Partners

The PPS provided feedback regarding the Account Support Team, the Independent Assessor, KPMG's²³ MAX facilitation, Salient's²⁴ DSRIP dashboard tool, and communication from NYS DOH.

The Account Support Team

The Account Support Team is designed to fulfill programmatic needs for the NYS DOH and the PPS. Each PPS has a single point of contact called a relationship lead and additional support from the performance facilitators and team analysts. The Account Support Team's main functions are to informally check in on PPS progress 1:1 on a monthly basis, provide technical support to the PPS, facilitate policy and protocol questions and answers between PPS and NYS DOH, and promote cross-PPS collaboration and learning. PPS were critical of KPMG, the company that was initially contracted to be the DSRIP Account Support Team. They reported that KPMG was unresponsive to many questions or provided misleading information. Another PPS described some helpful aspects to the KPMG team, but said that high turnover and inexperienced staff impacted their ability to be supportive at a critical time of PPS start up.

After the shift in the Account Support Team role to the Public Consulting Group, many PPS reported higher levels of satisfaction with content and clarity of support. They noted defined roles in the Public Consulting Group team, including subject matter experts, who were much more helpful to meeting their goals. However, many still described the Account Support Team as essentially a "pass-through," where they sent questions and then waited for the Account Support Team to gather a response from the NYS DOH or the IA:

The name "account support team" is a little deceiving because they are incapacitated in their ability to provide support. They are not the authority to give guidance, and we tend to find ourselves in waiting queues for answers, and some of those answers might not be accurate or come to pass. They're in a difficult spot. They're largely communication facilitators, and we don't always see or appreciate the message.

— PPS key informant

Some found that there was not a clear division of labor between the Account Support Team and Independent Assessor, both of which are services provided by the Public Consulting Group, with a firewall in between. The firewall was seen as an imaginary border which prevented the Account Support Team from sharing operational data with the Independent Assessor. To some PPS, this has led to responses not being delivered:

It has been of limited value. I know there was a purposeful separation between the Account Support Team and the Independent Assessor, but I can't tell you how many times we've been caught between the two. We needed an answer to learn how to submit a particular report; the Account Support Team can't tell us, the Independent Assessor doesn't answer us. If the account support can't give us answers, then it's not always evident to us what the help is that they're providing. It's not even clear to me what their role is because of how little they are able to assist us. – **PPS key informant**

In its duties as the Account Support Team, the Public Consulting Group also organizes state-wide and regional meetings for the PPS, as well as the DSRIP Learning Symposium. There was largely a consensus that the statewide all-PPS meetings were helpful. Many of the PPS suggested that less meeting time should be focused on information sharing from NYS, and that more time devoted to collaborating with the other PPS:

We learned about other PPS from our all-PPS meetings as well as the Greater New York hospital conventions, and we also coordinate some regional-based all PPS meetings with other workforce colleagues. By having those different formal and informal meetings, we began checking the structure of those organizations. It's a wonderful opportunity to collaborate together. We really try to make collaboration

²³ KPMG is a professional service company providing accounting, tax, and advisory services. KPMG was originally contracted to serve as the original Account Support Team for the DSRIP program and continues to coordinate the MAX series through July 2018.

²⁴ Salient is an enterprise performance management system company that facilitates a DSRIP enterprise dashboard tool for the PPS, Health Homes, Managed Care Plans and their partners.

a stepping stone. - PPS key informant

The nature of some of the topics at the all-PPS meetings doesn't necessarily require all of the PPS to come in-person to one location. We just had a meeting in New York City, and that was tough for some PPS outside of the city. The agenda could have been balanced over a webinar for a lot of the content. More thought could have gone into what's important to get people together for. In the space we were in, there wasn't room for networking or other benefits of getting folks together. – PPS key informant

[The State meetings] are helpful – a tremendous opportunity for networking with other PPS. We are learning what is best practice, and when folks are presenting we learn a lot about projects and support... So far we have learned a lot about cultural competency... These are well run and helpful. They are getting more positive, too." – PPS key informant

We have to be mindful of our PPS budget. We get allotted eight spots to send people to meetings. It would be helpful if the agenda came out ahead of time so I could figure out who to send early on rather than last minute. Initially, what would have been great is if they had created workstream-specific cross-PPS groups to share best practices. – PPS key informant

Independent Assessor

The DSRIP Independent Assessor has three primary functions throughout DSRIP. These include project plan application reviews, a mid-point assessment, and the monitoring of PPS progress. Monitoring occurs through quarterly reports and determines the semi-annual performance payments. PPS informants had mixed reactions to working with the Independent Assessor. Some PPS felt that the Independent Assessor had been responsive and consistent throughout startup:

I think it's been wonderful. Our questions that go to the Independent Assessor do get answered, and over the course of time, our understanding has been clarified in certain areas we were really dependent on.

- PPS key informant

Other PPS and some partners described the challenges working with the Independent Assessor:

The Independent Assessor is completely unresponsive, even against all logic... Our strategy now is to find workarounds, or we just say, "OK, we are going to fail this." There are a few [members] of the Independent Assessor, and they are very structured and disciplined to the point that they aren't into having one-on-one conversations with PPS. – PPS key informant

The Independent Assessor has not been able to provide the tactical, on the ground support. They have been fair, and there is a fairly defined procedure for submitting reports. ... the last stage of the formal written report was very candid and allowed us to get really great feedback on what we were missing. They've been fair in their role and in what they asked to do. It's a massive amount of information to have to work through. They're open to communication and getting feedback, but they don't always respond in a timely manner.

- PPS key informant

Many PPS also reported that there had been inconsistent information sharing for resolved answers from the Account Support Team, NYS DOH, and the Independent Assessor. Different interpretations across PPS had been challenging and they wished for a repository of responses for more transparent implementation and operation of the DSRIP program.

KPMG's MAX Facilitation

Many of the PPS reported that the KPMG-led Medicaid Accelerated eXchange (MAX) Series was helpful, and in some cases, transformative. The MAX series is focused on improving care for high utilizers and sustaining that change. It consists of three full day, structured and dynamic workshops, followed by action periods to implement change. PPS reported that they were happy to continue to put resources into those facilitations:

Regarding MAX, [we participated in that series], and it was one of the best exercises we have undertaken. It jump-started our focus on care management and coordination. KPMG facilitators have been extraordinary.

That's been a remarkable process. We are in the process of rebuilding our operation here in network development and provider relations – we are in a rebuild and reset mode. We are a little behind in network development, but we are working to build that area. That's been a challenge to find the right folks with the right experience. – PPS key informant

Salient's DSRIP performance dashboards

PPS reported that the DSRIP performance dashboards developed by Salient were helpful:

The support around Salient is great. They are very responsive to questions that are coming up. It's not an easy tool, and there's a lot of understanding in trying to teach how to use it. - PPS key informant

NYS DOH Communication and Information Sharing

PPS also noted that throughout the early phase of the DSRIP program, there were a number of communication challenges that emanated from the stakeholders described above and NYS DOH itself. As the DSRIP program was built there were a number of different communication vehicles. PPS and partners reported it difficult in this period to identify what the most pressing approach and authoritative information was or should be. For example, in late 2014 KPMG hosted a MIX (Medicaid Information eXchange) platform for PPS to discuss specific issues with each other which was subsequently replaced with a LinkedIn group in February 2016. PPS also reported initial confusion with identifying the authority of the Public Consulting Group Account Support Team and the Public Consulting Group Independent Assessor for guidance. PPS did report that a NYS DOH-led listening tour was a validating experience:

The one good experience we had was when the State did a listening tour. They brought a lot of their data team along, and the listening tour was helpful. – **PPS key informant**

During DY 0-3, NYS DOH centralized its communication approach with the DSRIP Bureau Mail Log (BML), Digital Library, and weekly email blasts.

There is a constant [knowledge] gap that happens because it's a dance between DOH working to centralize data and have leadership who can answer questions quickly without looking at something for weeks before finding an answer. – PPS key informant

PPS reported that the ongoing guidance for many aspects of the DSRIP program was still lacking and they wanted additional resources for consistent and clear feedback that would lend itself to more PPS success:

They need to tell us where the goalpost is, and the goalpost has to be reachable. There is so much inconsistency with the response that sometimes we almost wonder if they know what DSRIP is. There should be a resource online with each project or work stream that was continuous in nature that we could see the chronology of the guides for each project: What are the new directions and deliverables? The original implementation plan and project plan are outdated because every week there is an update or a tweak. It's almost impossible unless we are building our own database to track the programmatic requirements. We would like a person who has expertise going all the way back that we could get reliable answers from. They should have the same source, and all the PPS should have the same source, so that we all don't get inconsistent information from our Account Support Team. – PPS key informant

PERCEIVED OUTCOMES AND OBSERVATIONS

This section presents perceived outcomes from all stakeholders for DSRIP. Findings are reported from two quantitative data sources: the partner survey and CAHPS survey. These findings are supplemented with qualitative data from key informant interviews and focus groups.

Findings from the Statewide Partner Survey

As previously noted, an electronic survey was administered to project-associated partners statewide across all 25 PPS. A total of 897 DSRIP-engaged partners responded to the survey with useable answers. Respondents reported working at 796 different organizations. The largest group of respondents (28%) were part of community-based organizations, followed by individuals working in an office or clinic (20%). Community-based organizations are public or private nonprofit organizations that are representative of a community or a significant segment of a community and works to meet community needs.

Fifteen percent worked at a hospital, 13.5% at an organization focusing on mental health or substance use, and 13% at a nursing home, rehabilitation facility, or hospice/palliative care center. The remaining participants were part of case management or health home programs (3%), county government departments (e.g., Albany County Department of Health, 4%), pharmacies (0.6%), or other organizations (e.g., nurse staffing agency, insurance company, or could not be classified, 2%). Two participants did not provide their organization type.

One-third (33%) of the 897 respondents reported being involved in only one PPS, one quarter (24%) were involved in two, and 43% were involved in at least three. In evaluative responding, though, most participants (80.5%) chose to respond about projects within just one PPS; 12% responded about projects in two different PPS, and 7% responded about projects in three different PPS. Regardless of PPS, 41% of participants responded about their involvement in one project, 22% about two different projects, and 37% about three. A total of 1,691 project-based evaluations were provided by the 897 respondents.

Overall Project Satisfaction and Effectiveness

In the partner survey, about two-thirds of respondents were satisfied or very satisfied with project implementation (67%) (see Figure 1). Respondents also typically felt that the projects were effective in meeting their intended goals (12%: extremely effective, 28%: very effective, and 33%: moderately effective); only 19% reported perceiving the projects as being only slightly effective, and 7% as not being effective at all.

Respondents were also satisfied with the current operation (66%) and the overall operation in Years 0-2 (70%) of their projects (data not shown).

Figure 1. Partner survey: Project satisfaction (N=1,630) and effectiveness (N=1,457) ratings*

Satisfaction with Project Implementation



Effectiveness of Projects in Meeting their Intended Goals



^{*}The N's represent the total number of projects for which respondents evaluated satisfaction and effectiveness.

Not surprisingly, answers to the questions about project implementation and project operation were highly correlated. Respondents who were more satisfied with their project's implementation were also more satisfied with its operation.²⁵ Average responses to the two sets of questions were also highly correlated, demonstrating that respondent satisfaction and perceived project effectiveness were linked.

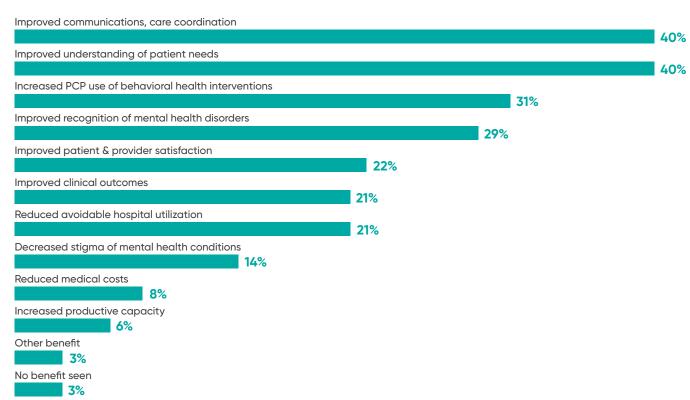
Satisfaction and perceived effectiveness responses were also evaluated by project, to determine whether some projects were evaluated more positively than others (data not shown). As some projects received only a few evaluations, a minimum of 20 total responses across PPS was set as a floor for inclusion. The possible score range was between one and five, with higher numbers reflecting more positive ratings. Across the 17 projects with a sufficient number of evaluations, mean satisfaction ratings ranged from 2.55 to 3.3, and mean effectiveness ratings from 2.26 to 2.88, indicating similarly positive results across projects. Projects 2.a.ii (Increase certification of primary care practitioners with PCMH certification and/or Advance Primary Care Models) and 2.b.vii (Implementing the INTERACT Project) received the highest satisfaction (3.27 and 3.3, respectively) and perceived effectiveness (2.88 and 2.83, respectively) ratings; Projects 2.d.i (Implementation of patient activation activities to engage, education, and integrate the uninsured and low/non-utilizing Medicaid populations into community-based care) and 3.a.ii (Integration of primary care and behavioral health services) received the lowest ratings.

Organization type had a significant impact on effectiveness ratings. On average, respondents who worked for hospitals, practitioners, and mental health and substance use groups rated DSRIP as most effective, and county government respondents and hospice/palliative care groups rated DSRIP as less effective.

Benefits Attributed to DSRIP

In the survey, the partners reported a wide range of benefits that they attributed to DSRIP and the projects (see Figure 2). Most commonly, the respondents indicated that DSRIP improved communication, leading to more coordinated care (40%), improved understanding of patient needs (40%), increased primary care provider use of behavioral health interventions (31%), and improved recognition of mental health disorders (29%). Somewhat fewer respondents indicated that DSRIP improved patient and provider satisfaction (22%), improved clinical outcomes (21%), reduced avoidable hospital utilization (21%), and decreased the stigma of mental health conditions (14%). Only 8% said that DSRIP reduced medical costs, and 6% said that it increased productive capacity. Just 3% of respondents said that DSRIP had some other benefit, including increased staff knowledge and awareness of needs, increased cooperation between different partners, and improved access to behavioral health services. Other responses included a decreased stigma of substance use disorders, greater early intervention, and increased clinical capabilities, integration, lower admissions, patient awareness of services, and referrals.

Figure 2. Benefits Attributed to DSRIP: Engaged partner survey responses by percentage (N=897)*



Benefits Attributed to DSRIP by Partner Project Type

To understand the relationship between project type and reported benefits, an analysis was conducted by grouping the implemented projects into ten categories, based on DSRIP's project domains and subgroupings (see Table 3).²⁶

Respondents' participation in each project category was noted; benefits reported by participants involved in versus not involved in a project category were then compared for each category.²⁷ Notably, comparisons that are not statistically significant indicate that those involved were equally likely (or unlikely) to see the benefit as those not involved. As each of the prevention domain subgroups had relatively few evaluations, especially in comparison to the other groups, they were collapsed together to form a singular prevention category.

Respondents involved in projects aimed at increasing behavioral health services were significantly more likely to report many benefits of the DSRIP program on primary care and behavioral health services integration. Respondents reported the following statistically significant outcomes:

- · improved communication leading to more coordinated care,
- · improved recognition of mental health disorders,
- increased primary care provider use of behavioral health interventions,
- · decreased stigma of mental health conditions,
- · improved understanding of patient needs,
- · improved patient and provider satisfaction,
- · improved clinical outcomes, and
- increased productive capacity (i.e. service capacity).

That respondents involved in projects focused on behavioral health showed such a large number of significant differences is not surprising, as the question was framed around benefits resulting from the integration of primary care with behavioral health (see Table 3).

Respondents involved in projects aimed at disease management were significantly more likely to report increased primary care provider use of a behavioral health intervention (e.g., Behavioral Activation, Interpersonal Counseling). Respondents involved in any of the prevention-focused projects (4.a.i, 4.a.ii, 4.a.ii, 4.b.i, 4.b.ii, 4.c.ii, 4.d.i) were significantly more likely to report decreased stigma of mental health conditions. Respondents involved in projects aimed at coordination of patient care (2.b.i-2.b.ix) were marginally less likely to report increased productive capacity.

No significant differences in benefits reported were found for those involved in projects focused on integrated delivery systems (2.a.i-2.a.v), or for projects focused on connecting settings and utilizing patient activation (2.c.i-2.d.i), versus other respondents.

²⁶ Categories contained a variation of number of projects from a single project (e.g., Promoting Maternal, Infant, and Child Health contained only 4.d.i; Preventing HIV/STD contains evaluations only for 4.c.ii—of note is that 4.c.i was not evaluated by any respondents) and nine projects (e.g., Care Coordination includes 2.b.i through 2.b.ix; Disease Management includes the evaluated projects from 3.b.i through 3.g.ii).

²⁷ Given the large number of comparisons performed for each project category, a Bonferroni correction was applied, making the new p-value for significance α /number of benefits compared (0.05/10), or p=0.005.

Table 3. Partner survey: Benefits reported by project category

	Project Categories						
Benefits Reported	Integrated Delivery (N=345)	Care Coordination (N=257)	Connecting Settings & Uti- lizing Patient Activation (N=158)	Behavioral Health (N=282)	Disease Management (N=172)	Prevention (N=107)	
Improved communication leading to more coordinated care	52%	45%	46%	63%*	55%	50%	
Improved recognition of mental health disorders	32%	23%	30%	40%*	32%	32%	
Increased primary care provider (PCP) use of behavioral health intervention	35%	24%	29%	46%*	38%*	30%	
Decreased stigma of mental health conditions						26%*	
Improved understanding of patient needs	41%	39%	40%	48%*	46%	42%	
Improved patient and provider satisfaction						16%	
Improved clinical outcomes	20%	19%	18%	30%*	25%	14%	
Reduced avoidable hospital utilization						16%	
Increased productive capacity (i.e., service capacity)	7%	3%†	7%	10%*	6%	5%	
Reduced medical costs	9%	7%	4%	8%	9%	5%	

^{*}Respondents involved with the project category were significantly more likely to report the benefit versus respondents not involved.

The N's are the total number of respondents involved with the project category and who answered the survey question on DSRIP program benefits.

Benefits Attributed to the DSRIP Program by Organization Type

Similarly, the relationship between organization type and reported DSRIP program benefits was examined to determine if different types of organizations tended to see different benefits (see Table 4).

First, participants working at hospitals were significantly more likely than others to report:

- · improved communication and care coordination
- · improved recognition of mental health disorders
- increased primary care provider use of behavioral health interventions

Clinical practitioners were also more likely than other groups to report:

- increased primary care provider use of behavioral health interventions
- · improved patient and provider satisfaction
- · improved clinical outcomes
- · increased productive capacity

Thus, employees at organizations most likely to be involved in direct patient medical care were most likely to report improvements in such care and care integration.

Mental health and substance use groups were more likely than others to report decreased stigma of mental health conditions. Nursing homes and rehabilitation centers were more likely than others to report decreased avoidable hospitalizations, but were also less likely to report improved recognition of mental health disorders, increased primary care provider use of behavioral health interventions, and marginally less likely to report improved communication and care

[†]Respondents involved with the project category were significantly less likely to report the benefit versus respondents not involved.

coordination. As such, both of these groups reported a benefit related to their primary focus as seen in Table 4.

In contrast, community-based organizations were significantly more likely than others to say that these questions were not applicable to their organization, and were less likely to report several other benefits, likely because their role in the health care process does not typically allow them to observe such changes. County government respondents were also less likely to report improved clinical outcomes.

No significant differences in benefits reported were found for participants from case management/health home organizations; hospice and palliative care organizations; or pharmacies, versus the other respondents.

Table 4. Partner survey: Benefits reported by organization type

	Organization Type									
Benefits Reported	Case Mgmt/ Health Home (N=26)	CBO (N=221)	Hospice/ Palliative Care (N=13)	Hospital (N=115)	Mental Health/ Substance Abuse (N=98)	Nursing Home & Rehab Center (N=85)	Pharmacy (N=5)	Practitioner Clinic (n=158)	County Govt (N=31)	All Others (N=14)
Improved communication leading to more coordinated care	38%	44%	38%	69%*	58%	34%†	20%	53%	32%	43%
Improved recognition of mental health disorders	19%	23%	23%	42%*	38%	13%†	0%	34%	19%	36%
Increased primary care provider (PCP) use of behavioral health inter- vention	19%	20%†	38%	50%*	28%	10%†	0%	49%*	29%	28%
Decreased stigma of mental health conditions	0%	12%	0%	17%	17%*	7%	0%	19%	16%	0%
Improved understand- ing of patient needs	46%	33%	31%	50%	39%	34%	40%	44%	26%	43%
Improved patient and provider satisfaction	8%	12%†	23%	30%	23%	20%	20%	34%*	10%	21%
Improved clinical out- comes	19%	12%†	15%	29%	26%	21%	20%	30%*	0%†	21%
Reduced avoidable hospital utilization	19%	18%	15%	22%	26%	34%*	20%	18%	13%	14%
Increased productive capacity (i.e., service capacity)	4%	6%	0%	3%	9%	2%	0%	11%*	3%	7%
Reduced medical costs	8%	4%	8%	10%	7%	10%	20%	10%	6%	7%

^{*}Respondents working for the organization type were significantly more likely to report the benefit versus those not affiliated.

Overall, respondents were likely to report improved communication and care coordination, especially if they worked at a hospital, but regardless of project type. Participants were also likely to report an improved understanding of patient needs, regardless of organization type, but especially if they were involved in a project focusing on behavioral health.

[†]Respondents working for the organization type were significantly less likely to report the benefit versus those not affiliated.

The N's are the total number of respondents working for the organization type and who answered the survey question on DSRIP program benefits. Abbreviations: Case Mgmt=Case Management, CBO=Community-Based Organization, Rehab=Rehabilitation, Govt=Government

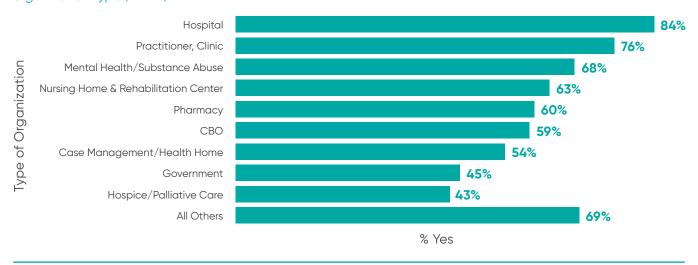
similarly, participants in disease management or prevention projects were likely to report a behavioral health benefit. Those involved in other projects may have observed some of these benefits but did not report them as consistently.

Participants working in hospitals or private medical practices were most likely to report several benefits from the DSRIP program. Respondents from mental health and substance use organizations, or from nursing homes and rehabilitative centers, were also likely to report a benefit related to their organization's aims. Community-based organizations and county government respondents were likely to note that they could not evaluate the presence of these benefits, as their roles did not include direct clinical care.

Changes to Service Provision

In Figure 3, nearly 70% of respondents said that the DSRIP program had changed the way their organization provided services. Organization type had a significant impact on responses: partners from hospitals were most likely to say that the DSRIP program had changed how their organization provides services, with practitioners following; hospice/palliative care and county government respondents were the least likely.

Figure 3. Partner survey: "Has DSRIP changed the way your organization provides services?" by organization type (N=745)



Qualitative Findings on Perceived Impact

PPS key informant interviews and project-associated partner focus groups were consistent with the findings from the survey. PPS felt, overall, that the DSRIP program had laid foundations for changes in the health care system. For example, one key informant said that the DSRIP program had led people to examine workflows and create innovative service models for meeting patient needs. Notably, the change to working with community-based organizations was highlighted as a major transformation within health care delivery:

Just in terms of moving everybody from thinking about individuals to thinking about populations. It has forced in a positive way this mind shift to working with [community-based organizations] to a degree. We had a long history of collaboration with [community-based organizations], but it has still opened the door further. If DSRIP ended tomorrow, I don't see us going back to the way it was before. – PPS key informant

Other PPS felt that the DSRIP program was not the only driver of change in the health care system, but that it provided a framework for that change:

I don't think DSRIP is going to change anything by itself. If you draw an analogy, DSRIP is the vehicle that provides the way to make it happen, but the driver of the vehicle is the providers. The hospital system, primary care, organizations of providers, behavioral health...they're the actual drivers. We [DSRIP] just provide the vehicle and the framework to make it happen. – PPS key informant

Regional partner focus groups agreed that the DSRIP program affected their collaboration with community-based organizations. The community-based organizations shared how the DSRIP program was moving them toward work they had wanted to do for many years but were unable to do due to lack of support:

Working with these entities that...are large and multi-sector... is challenging. We have been able to try to accomplish things ... we've been trying to for twenty years. Where our mission is to improve access to care, we've been improving access to health insurance. The care has been on the edges because we could never get staff to do that. The coaching and the PAM work helps us to take that next step so that we don't just get people health insurance and say, good luck, hope it works out. But we actually go the next step and help them work out problems. And, if they have problems they can come back and we'll help them with that. And, you know we're thrilled to be able to do that – Community-based organization Regional focus group participant

Patient Experience

Patient experiences were assessed using the CAHPS patient survey; the partner survey; focus groups of engaged partners; and the key informant interviews of administrators at each PPS. For the most part, patients were satisfied with their health care partners and their care coordination. Health care service partners and administrators generally felt that the DSRIP program was improving care through coordination improvements, greater recognition of the importance of behavioral health, and more flexibility to spend funds on innovative interventions.

Patient Perspectives

CAHPS surveys completed by 10,884 patients in Demonstration Year 1 and 7,915 patients in Demonstration Year 2 showed that, overall, patients were satisfied with their health care partners (see Figure 4). These results are consistent with baseline patient satisfaction measurements in NYS overall for the Medicaid population. On a scale of 0 to 10, where 0 was "Worst provider possible" and 10 was "Best provider possible," 84% rated their provider eight or above in Demonstration Year 1. Over half (51%) rated their provider a 10. In Demonstration Year 2, 82% rated their provider eight or above, with 47% rating their provider a 10. Over 80% felt their provider was a good communicator; received good care coordination; received timely appointments, care, and information; and experienced helpful, courteous, and respectful office staff. Between Demonstration Year 1 and 2, there were small decreases in these scores (under 2%), and while some of these changes were statistically significant, additional data points are needed to determine if there is trending in any direction. However, it is important to note that satisfaction with the various measures all remained high (over 80%). Figure 4 displays the results.

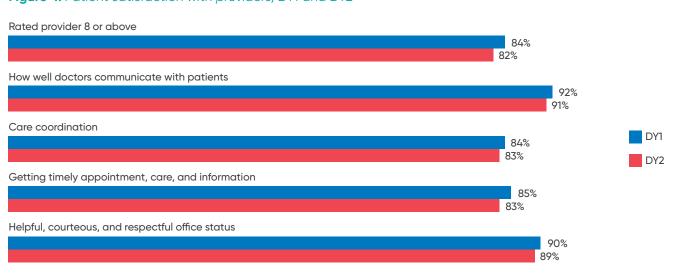


Figure 4. Patient satisfaction with providers, DY1 and DY2

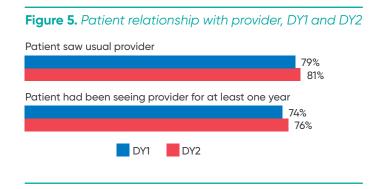
Table 5 shows the items that were used to calculate the composite scores in Figure 4. For each item, respondents were asked to consider how often they had a specific experience in the past six months, and offered the response options of Never, Sometimes, Usually, and Always. Responses were averaged to compute the composite scores.

Table 5. CAHPS survey: Percent of patients answering "Usually" or "Always" to patient satisfaction items

	DY1	DY2
How Well Doctors Communicate with Patients	92%	91%
How often did this provider explain things in a way that was easy to understand?	92%	91%
How often did this provider listen carefully to you?	93%	92%
How often did this provider show respect for what you had to say?	94%	93%
How often did this provider spend enough time with you?	90%	89%
Care Coordination	84%	83%
How often did this provider seem to know the important information about your medical history?	90%	89%
When this provider ordered a blood test, x-ray or another test for you, how often did someone from this provider's office follow up to give you those results?	84%	82%
How often did you and someone from this provider's office talk about all the prescription medicines you were taking?	77%	77%
Getting Timely Appointment, Care, and Information	85%	83%
When you contacted this provider's office to get an appointment for the care you needed right away, how often did you get an appointment as soon as you needed?	84%	81%
When you made an appointment for a check-up or routine care with this provider, how often did you get an appointment as soon as you needed?	87%	86%
When you contacted this provider's office during regular office hours, how often did you get an answer to your medical question that same day?	84%	82%
Helpful, Courteous, and Respectful Office Staff	90%	89%
How often were clerks and receptionists at this provider's office as helpful as you thought they should be?	87%	86%
How often did clerks and receptionists at this provider's office treat you with courtesy and respect?	92%	92%

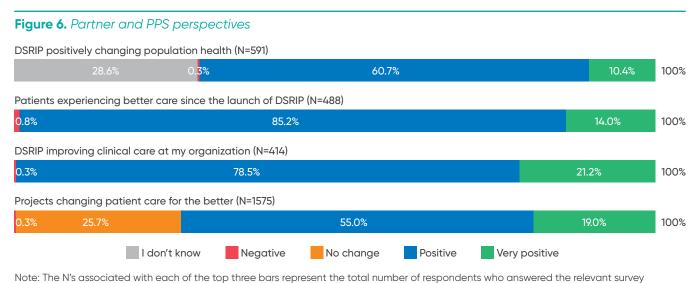
Because access to primary care and having an established relationship with a primary care provider improves health outcomes and reduces the cost of care, CAHPS asks about continuity of care. Improved health outcomes and reduction of cost of care are advanced by providing preventive interventions, facilitating access to the rest of the health care system, reducing preventable hospital visit (Starfield, 2005).

For more than three-fourths of respondents (79% in DY1; 81% in DY2), the provider from whom they received care was the provider they usually saw if they needed a check-up, wanted advice about a health problem, or got sick or hurt (see Figure 5). Nearly as many (74% in DY1; 76% in DY2) had been seeing this provider for at least one year. These increases may mean that the DSRIP program is more effectively connecting and maintaining patient access to primary care, but it is not possible to say whether this change is meaningful until more years of data have been collected.



Partner and PPS Perspectives

Virtually all respondents who answered the survey question asking about patient care since the launch of DSRIP felt that patients were experiencing better care since the program began (99%) (see Figure 6). Three-fourths felt that projects were changing patient care for the better (19% reported very positive changes, 55% reported positive changes); about a quarter of respondents (26%) saw no changes in patient care due to these projects, and 0.3% perceived negative changes. Almost all respondents (99%) reported that the DSRIP program was improving clinical care at their organizations; only one reported negative changes since the implementation of the DSRIP program. Similarly, respondents believed that the DSRIP program was positively changing at least some aspect of population health in their service area; only one perceived negative changes.



question. The N associated with each of the top three bars represent the total number of projects for which respondents answered the question about the projects changing patient care.

When partner survey respondents were asked about the benefits of the DSRIP program, respondents shared that the DSRIP program has improved communication between providers, leading to more coordinated care; improved provider understanding of patient needs; increased primary care provider use of behavioral health interventions; and improved recognition of mental health disorders.

Qualitative Data on Changes in Patient Care

Supporting the survey results, many of the providers and administrators who participated in the regional focus groups and interviews saw the DSRIP program as improving coordinated wraparound care. The financial incentives to coordinate care motivated organizations to find ways to do so more effectively and led to faster referrals for substance use disorders and behavioral health.

With greater incentives for keeping patients out of the emergency department and urgent care, providers were more motivated to develop systems for identifying patients who frequently utilized emergency and urgent care and to offer additional services to those patients. Emergency department patients were more likely to be connected with primary care providers. It also inspired improved efficiency in outpatient care (e.g., by transferring diagnostic imaging records more quickly so a patient could see an outpatient surgeon before the close of business instead of using the emergency department).

The incentives of the DSRIP program also raised awareness of the social determinants of health and began to lead to more programs to address these. A more holistic view of patients allowed better connections to social services such as housing assistance:

I do think it is helping, to some degree, with some of the silo-ing that had happened and realizing that we may be touching the same lives, just in different ways." – **Primary care Regional focus group participant**

More community-based care outside of clinics was consistently mentioned as an important positive effect of the DSRIP program. Community navigators were able to work with hospitalized patients and improve their home care after their discharge. Community paramedicine provided home visits to keep patients healthier and prevent complications that would require emergency room visits, and telehealth improved rural patients' access to specialists.

The DSRIP program provided the ability to pay for community health offerings (such as yoga classes) and home-use products such as air purifiers for asthma patients. Partners also reported that the DSRIP program supported in-home paraprofessional services (e.g., food delivery, shoveled walkways), which were seen as reducing the need for emergency services. The ability to provide transportation to health care providers and pharmacies increased compliance with a

specialist and mental health care. New data systems and intake items allowed better chronic disease management for patients who visited providers for other reasons, such as mental health or substance use:

And, it has helped us uncover new ways to go to business and take care of the patient. And, it has helped us focus more on a holistic approach to a patient than just a hospital or primary care approach. So, we have seen the benefit. – Mental health and substance use Regional focus group participant

It enables us to merge these funding streams to create a patient-driven service which I think is awesome.

- Community-based organization Regional focus group participant

Some saw the DSRIP program as increasing hospitals' and private practices' willingness to work with community-based organizations and substance use treatment providers. Private practices that did not previously accept Medicaid patients began to do so after project money was made available. However, there was wide variation between PPS and their use of community-based organizations and outside hospital collaborations depending on region and PPS integration focus.

I do think it's focused us to understand that Medicaid patients matter. So, suddenly it's like not that they're the patients that are, especially for smaller private practitioners, are just going to lose your money faster. But, it may be a shift in our thinking around allowing us to focus on that population. So, I think that's a positive. — Primary care/hospital Regional focus group participant

Several administrators and providers said that the DSRIP program had increased patient empowerment, giving patients more of a say in their care and a greater sense of personal responsibility in their outcomes. They saw a change in provider perception of patients driving their own care and hospitals providing more education to help enable that.

Other study participants did not perceive changes in patient care. Some felt that bureaucratic requirements had increased for patients; for example, they said they had more forms to read and sign. And some saw money being spent in ways that improved their DSRIP measures, but they felt it was not the best use of funds overall for innovation or patient-centered care. Several administrators did not yet perceive changes in care but anticipated that they would after they had time to better build their systems. One said that it would take more than five years for major systems transformations to show visible results, and another said that the DSRIP program did not provide enough time or money to effect change. Some noted that social determinants of health was such a larger component of health outcomes that any health care system change could only have a small impact by comparison.

STAKEHOLDER THEMES

This section summarizes the key findings from the Implementation and Process Study and provides synthesis and feedback from stakeholder input for future implementations.

Communication

Stakeholders' ability to receive clear information on all aspects of the DSRIP program is important, as it affects daily tasks, coordination of in-house and between-provider services, and overarching implementation decisions. Despite a wide range of communication platforms utilized by all stakeholders (e.g., newsletters, email blasts, webinars, in-person meetings), a lack of communication was reported across many entities: NYS DOH-to-PPS, PPS-to-PPS, PPS-to-partner, health plans-to-partner, and partner-to-partner. Stakeholder themes include:

- Continue to target communications and reach out to DSRIP stakeholders. While NYS DOH has made significant improvements to its communication protocols since the start of the DSRIP program, stakeholders still reported wanting additional targeted communications, such as information from NYS DOH targeted to providers and managed care organizations.
- Revise annual meeting structures. Stakeholders reported wanting additional opportunities for PPS to meet with other PPS and partners to discuss challenges and successes. These include forums on topics including: treating at-risk populations; overcoming obstacles to patient engagement; effective data strategies; and community outreach and buy-in.

- Raise awareness of information repositories. While NYS DOH has created a centralized FAQ and webinar repository,
 PPS still reported that they felt each received different guidance from the Account Support Team or the Independent
 Assessor. PPS would like more transparency of published answers to questions from the stakeholders so that all PPS
 are informed of the clarification.
- Transparency for upcoming value based contracting. Partners are eager to hear about the decisions that health plans will be making in regard to value based contracting

Training

Training and education of partners are critical components of ongoing implementation. Partners appreciated the training provided on DSRIP objectives, implementation, and accomplishments. Their feedback includes:

- Continue value based payment training. Despite provider-based assessments that they were largely knowledgeable on value based payment, the vast majority of stakeholders requested more resources and knowledge.
- Tailor training for partner types. For example, non-Medicaid billing community-based organizations reported feeling
 exhausted by certain trainings and remaining unsure of how to move toward value based payment. Full days of training that were not relevant to all partners could feel frustrating and demoralizing.
- Revisit training types and locations. Partners requested more in-person and hands-on training that fosters more
 dialogue than current webinar and other distance training. In-person training would also facilitate intergroup discussion to understand how various providers are transforming their practices, and might also help address the concern
 that not all partners within an organization are understanding or gaining the DSRIP program information needed to
 transform care.

Data and Information Technology Infrastructure and Support

These recommendations focus on real-time data and interoperable data infrastructure, as well as the standardization of software. These are critical infrastructure needs that are necessary to produce efficient patient record management.

- Clinical data sharing progress reporting. Despite acknowledgement that claims data will always have a lag, DSRIP stakeholders (Partners and PPS) are still requesting more detailed and timely clinical data. They noted challenges with accurately gauging their performance based on data that were already months or even years old. Stakeholders requested more progress reports from NYS DOH in the area.
- Ensure that all stakeholders are clear on current interoperability progress. While acknowledging that NYS DOH has provided substantial resources to improve information sharing and that there are ongoing federal/business initiatives in interoperability, it is important to note the ongoing challenges that DSRIP stakeholders are facing in this arena. Partners reported significant challenges to sharing patient information among themselves, due to the lack of standardization in information sharing platforms. As each clinical system in NYS is unique, partners voiced frustration with the interoperability of electronic medical records and electronic health records. Partners requested more support from the NYS DOH in promoting better RHIO/QE partnerships or leveraging other data sharing capabilities. PPS want to be able to share more data with their partners, and partners desperately want data to meet their project goals.

DSRIP Program Payment Models

The DSRIP program's financial model is complex and changes over time as goals move from payment for reporting to payment for performance. Many of the PPS have had success with funds flow to partners, but some partners are reporting that they do not perceive an equal funds flow. A consensus in the non-hospital focus groups was that non-hospital partners felt that funds had been much more generously funneled to hospitals over other partners. Stakeholder feedback includes:

• Payment model fairness. Stakeholders reported that there are inequities in how funds are distributed to partners. Many partners reported the viewpoint that hospital-based PPS had kept funds internal to the hospital. If that is the preferred model and is unlikely to change, then the PPS that are moving towards a more internal funding model route should be transparent with their decision making and with their partners, who may have developed different expec-

tations at earlier stages of the project. Additionally, while NYS DOH has allowed PPS to opt into a Provider Import Replacement Tool (PIT-R) to report funds flow to more specific categories of providers, partners are still reporting that they feel the funds flow model is not inclusive of all of the stakeholders needed to make systematic health care change. Partners called for additional NYS DOH oversight in this area.

• Include community-based organizations. Stakeholders requested that decision-makers increase the involvement of community-based organizations in funding distribution decisions. As community resources are a key component of DSRIP program success in decreasing emergency department visits and increasing integrated patient care, community-based organizations should have an increased role. Community-based organizations have the experience to increase community engagement and patient buy-in that health care partners might not as readily have. However, community-based organization reported that their involvement has been hindered by lack of infrastructure and resources to make those linkages. They requested additional opportunities to demonstrate value, more capacity building, and funds flow.

Programmatic Changes

In analysis of stakeholder data, several suggestions related to the programmatic scope of the DSRIP program emerged:

- Broaden focus on non-Medicaid populations. Partners reported that guidelines for serving both Medicaid and
 non-Medicaid patients would be helpful. The focus has been on Medicaid populations, without as many guidelines
 for those with no insurance or those who are dually eligible for Medicaid and Medicare. Stakeholders reported that
 while groups such as the Intellectually/Developmentally Disabled population may not fit directly under the DSRIP
 program, they are affected by project implementation and should be considered.
- Expand network of collaborations within the DSRIP program. Partners would like to extend their collaborations to a wider network of community-based organizations to increase their connectivity. In open-ended survey responses, partners mentioned specific organizations they would like increased collaboration with, such as Agencies on Aging and local YMCAs.
- Consider an extension of the DSRIP program timeline to effect systems-level change. PPS key informants described the DSRIP program as more of a catalyst, in planting the seed and putting forth infrastructure towards change, than a vehicle of transformation. Since the timeline is short for transformation, PPS and other stakeholders recommended a "DSRIP 2" project, such as those in Texas and California. They noted this would allow PPS to sustain partner engagement and detect systemic change.

Section V

Literature Review to Prepare for Time Series Analysis

OVERVIEW

To evaluate the DSRIP program in transforming the system-wide health care delivery through Medicaid, the Time Series Analysis team must be cognizant of the diverse interacting forces that can possibly conflate the true contribution of the DSRIP program with other concurrent programs. To statistically calculate the DSRIP program's impacts, it is imperative to identify and have a thorough understanding of similar health care reforms and how they have historically affected health care delivery. The Time Series Analysis team conducted a thorough search of top journals, such as Journal of the American Medical Association, The New England Journal of Medicine, Medical Care, Journal of Health Economics, Health Economics, Journal of Public Economics, Health Affairs, and many others, using a broad range of keywords, like Medicaid Reform, Medicaid Expansion, Affordable Care Act, Preventable Readmissions, etc., to identify peer-reviewed articles that will provide critical insights into the effects of DSRIP-like interventions. This review provides the Time Series Analysis team with an assessment of the current state of research in this field and allows it to correctly model and analyze the impacts of the DSRIP program on various performance measures. Findings from the literature review are summarized in the narrative below and Table 6.

PREVENTABLE READMISSIONS

The DSRIP program's main metric for assessing a system-wide transformation and integration is preventable hospitalizations, with a statewide goal of reducing avoidable hospital use by 25%. The literature regarding reduction of preventable readmissions is vast and has been a leading topic of health care policy and practice reform for some time. A review of literature (Vest, et al., 2010) from medicine, health, and health services research suggests significant evidence of avoidable hospital utilization with variation in index conditions, readmitting conditions, and the delay of readmission. Studies suggest that patients with higher follow-up rates after discharge have a lower risk of 30-day readmission (Hernandez, et al., 2010). Studies have shown that nearly 20% of Medicare beneficiaries are re-hospitalized within 30 days following discharge and 34% within 90 days (Berenson, et al. 2012; Jencks, et al., 2009). Avoidable readmissions have been documented in other populations as well (e.g., the VA). With the aim to address the long-standing concern that high rates of hospital readmissions reflected poor quality of care and resulting in increased costs to the Medicare program, CMS established the Hospital Readmission Reduction Program, which penalizes hospitals with excess of 30-day readmissions. The program has received a great deal of attention and has been controversial, particularly because of its unintended adverse consequences (Joynt and Jha, 2013; Jha, 2018; Joynt and Jha, 2013; Joynt and Jha, 2011; Joynt, et al., 2011; Gorodeski, et al., 2010; Walraven, et al., 2011). The concern is that the policy disproportionately penalizes safety net hospitals, which provide care to patients of low-socioeconomic status. Readmissions might be driven by patients' personal circumstances after discharge rather than the hospital's poor quality of care. Factors that significantly affect a patient's readmissions are demographic and clinical conditions, community characteristics and local practice patterns (Allaudeen, et al., 2010; Maddox, 2017; Jencks, et al., 2009; Shulan, et al., 2013; Hannan, et al., 2003; Barnett, et al., 2015; Sills, et al., 2016; Zuckerman, et al., 2016). There is also evidence of racial disparities in the rates for Potentially Preventable Hospitalizations, especially for African-Americans and American Indians and Alaska Natives. In evaluating the DSRIP program, the Independent Evaluator will face similar issues.

McGarry et al. (2016) studied the Hospital Readmissions Reduction Program (HRRP) in New York State, identifying the impact of HRRP penalties by using the longitudinal hospital claims dataset from the Statewide Planning and Research Cooperative System (SPARCS) spanning the period 2008-2013. Their main outcomes of interest are the likelihood of being readmitted and the likelihood of returning to the hospital Emergency Department care within 30 days of discharge for an eligible diagnosis, focusing on inpatient admissions for Medicare Fee for Service beneficiaries over age 65. Accounting for

Review to Prepare for Time Series Analysis

secular trends and background effects, they conducted a Difference-In-Difference analysis. They found that Medicare readmission rates significantly declined over the time period, but that HRRP may not be the sole reason for the decline. They found no significant difference between reduction of readmission rates in hospitals affected by HRRP compared to hospitals not affected by it. McGarry et al. (2016) conclude that HRRP has generally increased attention to preventing readmissions without being directly responsible for the observed decrease. They also found that there was a significantly higher chance to have post-discharge Emergency Department visits in facilities facing higher penalty risks. One might argue that these hospitals may substitute Emergency Departments for inpatient care in an attempt to avoid the penalties. These results are also consistent with other studies (Carey & Lin, 2015). A similar study (Mellor, et al., 2016) investigates the impact of the Readmission Reduction Program using hospital discharge data from Virginia, finding that HRRP significantly reduced the likelihood of readmission for Medicare patients.

ACCESS TO CARE AND UTILIZATION

The impact of both public and private health insurance programs on access to care, utilization, and health outcomes has been a topic of research for several decades. This has resulted in a number of notable thorough reviews of literature regarding private health insurance (Cutler & Zeckhauser, 2000), Medicaid (Buchmueller, et al., 2015), and labor market outcomes (Gruber, 2008). A substantial part of this literature focuses on several program expansions in Medicaid and/or Medicare. Expansions for children and pregnant women in the early 1980s and the 1990s led to reductions in avoidable hospitalizations among children (Currie & Gruber, 1996; Currie & Gruber, 1996), infant mortality, and low-birthweight babies (Dafny & Gruber, 2005). There is also evidence that access to care and health improved among childless adults in the early 2000s, while reducing HIV related mortality (Sommers & Grabowski, 2017). Literature addressing the 2008 Oregon Medicaid lottery (a DSRIP-like initiative) found increased health care access and utilization that led to large gains in self-assessed health (Finkelstein & McKnight, 2008; Finkelstein, et al., 2011). The 2006 Massachusetts health care reform shows similar results, with a significant effect on self-assessed health and an increase in health care access.

The primary goal of the Affordable Care Act (ACA) was to achieve nearly universal health insurance coverage with the idea that this reform would translate into increased access to care, better health outcomes and less hospital costs. Results from studies of ACA's early impact suggest that Medicaid expansion states had added insurance coverage compared with non-expansion states. There was also an increase in overall probabilities of having a primary care doctor and a checkup post-ACA (Long, et al., 2014; Courtemanche, et al., 2016; Courtemanche, et al., 2016; Smith & Medalia, 2014; Obama, 2016; McMorrow, et al., 2016), but with no significant difference in population health between expansion and non-expansion states (Kaestner, et al., 2017; Frean, et al., 2017). Gains in access were largest among recipients with lower education and income levels. However, it is unclear whether these estimates are able to disentangle causal effects of the ACA from other national trends and policies.

The primary purpose of this review has been to provide the Time Series Analysis team with a foundation on which it can build the methodology to measure the DSRIP program's contribution towards performance measures and then properly analyze the pathways to actual effects. The DSRIP program has been implemented by changing health care delivery in the Medicaid population, but with an objective to bring about a statewide transformation. The crucial step in evaluating such a transformation is to understand the intricacies of how a specific health care initiative may affect different population groups and hospitals differentially, and how other reforms were already affecting them before the DSRIP program. This is what this review achieves.

Table 6. Times series literature review findings

Main Observations

Relation to New York State DSRIP

Preventable Readmissions

- Substantial variation in rates of preventable readmissions based on index conditions, readmitting conditions, and delay of readmission. (Vest et al., 2010)
- Patients from high-poverty neighborhoods are 24% more likely to have a readmission, after adjusting for other demographic factors. (Hu et al., 2014)
- Patients discharged from hospitals with higher follow-up rates have a lower risk of 30-day readmission. (Hernandez et al., 2010)
- · Avoidable hospital readmissions have been documented for other populations,
 - Nearly one-fifth of Medicare beneficiaries are re-hospitalized within 30 days and onethird are readmitted within 90 days. (Jencks et al., 2009, Berenson et al., 2012)
 - · There has been an increase in readmissions in Veteran's Administration hospitals.
- · In New York State,
 - Statewide, potentially preventable readmissions declined from 2009-2012. The major condition for readmission was heart failure.
 - New York City potentially preventable readmission rates are significantly higher than the rest of New York.
 - 75% of ER visits in New York State in 2012 were potentially preventable.
 - Readmission to a different hospital increases rates of mortality. (Pak et al., 2015)
- Medicare Hospital Readmission Reduction Program (HRRP)
 - Reduced readmissions rates among Medicare beneficiaries during 2012-2014. (Boccutti et al., 2015)
 - In New York State, there was a reduction in preventable readmission rates without a corresponding increase in outpatient hospital use. (Carrey et al., 2012; McGarry et. al., 2016)
 - Actual impact of HRRP on observed declines in readmission is unclear. Some literature finds that decrease in readmission rates are mostly due to change in coding practices.

- Preventable Admissions and Readmissions is one of the main metrics for evaluating a system-wide health care transformation for the New York State DSRIP program, and hence the Independent Evaluator required a thorough understanding of the subject.
- Create proper controls in the analytical models based on the review of factors affecting readmissions from the literature.
- Control for trends in non-Medicaid population when judging the impact of the DSRIP program on statewide readmission rates.
- Given readmissions were already decreasing before implementation of the DSRIP program, the evaluation team needs to properly control for this trend.

Access to Care and Utilization

- Medicaid expansion in the 1980s and 1990s reduced low birthweight, infant mortality, and avoidable hospitalizations among children (Currie et al., 1996, 1996b; Dafny et al., 2005). It also increased smoking among pregnant women (Dave et al., 2015) and inconsistent effects on their health care utilization (Epstein et al., 1998).
- Medicaid expansions for childless adults in 2000s increased self-reported access to care and reduced mortality, mainly related to HIV treatment (Sommers et al., 2012).
- Medicaid disenrollment in Tennessee reduced access to care and self-assessed health (Tello-Trillo 2016).
- Most of these studies deal with the effect of expansions on outcomes that are used as performance measures in the New York State DSRIP program.
- The research designs of these studies may be suitable to use in New York State DSRIP's analysis.

Aging

- Health care utilization increases sharply at the age of eligibility for Medicare (Lichtenberg; 2002, Card et al., 2008).
- Mortality among patients admitted to ER falls sharply with eligibility for Medicare (Card et al., 2009).

2006 Massachusetts Health Care Reform

- With a combination of insurance market reforms, mandates, and subsidies similar to the Affordable Care Act, the reform increased access to primary care (Kolstad et al., 2012; Miller, 2012).
- The reform improved adults' self-assessed health and reduced body mass index (BMI) (Court-manche et al., 2014).
- There is evidence of a reduction in mortality rates (Sommers et al. 2014) but questions remain if this is an impact of the reform (Kaestner, 2015).

- Information about the behavior of the non-Medicaid population is crucial when searching for a proper comparison group.
- The Independent Evaluator will compare overall performance on the New York State DSRIP program to other states in terms of access to care, health care costs, and quality of care improvements using information found in literature reviews. The Independent Evaluator will not be use other state datasets for the Time Series Analysis.

Main Observations

Relation to New York State DSRIP

Affordable Care Act (ACA)

- Mandate to cover dependents up to 26 years old increased access to care (Sommers et al., 2013) and general health care utilization (Chua et al., 2013), but not utilization of preventive services (Barbaresco et al., 2015).
- More generally, it has been found that the timing of ACA coincided with increased access to care (Polsky et al., 2015; Shartzer et al., 2015) and better self-assessed health (Sommers et al., 2015).
- Given New York State expanded Medicaid under the ACA, it is expected to have similar impacts on it as the literature suggests.
- Since ACA affected many of the DSRIP program performance measures, not accounting for its effect will inflate the impacts of the DS-RIP program on these measures.

Section VI

Review of §1115 Medicaid Waiver Literature

OVERVIEW

The Independent Evaluator is interested in how the New York §1115 Medicaid waiver compares to other states both in terms of design and impact. To begin to understand these comparisons, the Independent Evaluator has compiled a comprehensive repository of all studies (both peer-reviewed and evaluation reports) performed on §1115 Medicaid waivers since their inception decades ago. The approach used to review the §1115 Medicaid Waiver literature is described below, followed by tables summarizing the major findings

LITERATURE REVIEW APPROACH

The Independent Evaluator first explored the "State Waivers List" database compiled by CMS. This database lists all Medicaid waiver applications the federal government receives from states (CMS, 2017). Utilizing the CMS list and the files posted alongside each waiver (including application materials, related documents, approval letters, fact sheets, and reports), the Independent Evaluator attempted to identify and secure evaluation reports or products (policy briefs, journal articles, etc.) for all approved §1115 demonstration waiver programs. The search returned 101 waiver applications with four different statuses: approved, pending, inactive, or terminated. The search also yielded information regarding the date of approval, expiration date, and summary of proposed modifications via the waiver program.

IDENTIFYING ALL PEER-REVIEWED ARTICLES USING §1115 MEDICAID WAIVER DATA

Once the Independent Evaluator had obtained a list of all §1115 Medicaid waivers, the Independent Evaluator first sought specific studies using these data. The peer-reviewed literature was searched from three databases: PubMed/Medline, ProQuest, and a university-operated proprietary search engine. The following search terms were used within each database: 1115 waiver, 1115 reports, 1115 evaluation, demonstration waiver, demonstration waiver report, demonstration waiver evaluation, demonstration waiver analysis, as well as the proper title of each specific waiver application (e.g. TennCare, Alabama Medicaid Transformation).

- The Independent Evaluator targeted publications from 1982 to 2017, given that 1982 was the first instance of a statewide demonstration waiver - allowing Arizona to operate their Medicaid program as an integrated managed care program.
- After this initial search, the Independent Evaluator reviewed each abstract collected to ensure that each article
 included an evaluation of a §1115 demonstration waiver. Subsequently, the Independent Evaluator searched the
 bibliographies of the articles to ensure that earlier foundational research on waiver evaluations was included in
 the review.
- Inclusion in the literature review was restricted to empirical studies or those that examined any component of a §1115 demonstration waiver. For example, if a peer-reviewed publication focused only on infant mortality outcomes as a result of a broader §1115 Medicaid waiver program that included a number of outcomes, it met the literature review inclusion criteria. Conversely, the Independent Evaluator excluded studies from the review which were government reports or an evaluation of a different type of waiver program (e.g. 1915(c) waivers).
- · After applying these criteria to the search results, the Independent Evaluator returned 77 peer-reviewed publications.

Review of \$1115 Medicaid Waiver Literature

The following information was then documented for each publication: article title, author name, publication, year of publication, specific state under evaluation, title of waiver, date of evaluation, data sources, methods, findings, limitations, and any specific subpopulation within the study.

Table 7. Findings of §1115 Medicaid waiver literature review and relevance to evaluation of New York State DSRIP program

Peer-Reviewed Literature: General Findings

- The vast majority of peer-reviewed articles were not written about the waiver specifically. Rather, they examined a specific disease or condition (e.g., diabetes) in a narrowly focused empirical study.
- Most peer-reviewed publications used quantitative data, many from publicly-available data sources (e.g., Medicaid claims data, hospital discharge data). However, a number of studies used qualitative data (e.g., focus groups, key informant interviews, survey data) to understand how specific programs were functioning and identify facilitators and barriers to program implementation. In many studies, the data were aggregated to make comparative case studies that examined certain groups of people, organizations, or regions. Few assessments included the patient perspective.
- The states written about most often were Oregon, Tennessee, Massachusetts and Maryland.
- The most frequently used quantitative methodologies were difference-in-differences, time series analysis, multivariable logistic regression analysis, and propensity score matching. The most frequently used qualitative methodology was content analysis.
- The main limitations noted in the peer-reviewed studies were: (1) lack of comparison groups, (2) inability to generalize since only a single state's data were used, (3) data quality and missing data, (4) lack of baseline measures, (5) demonstration period too short to identify trends, (6) long-term effects from the intervention not tracked or observed beyond the demonstration period, and (7) inability to determine causality.

Relevance to New York State DSRIP Evaluation

- The quantitative and qualitative data sources used in the peer-reviewed manuscripts are consistent with the data sources that the Independent Evaluator plans to use in the New York State DSRIP evaluation.
- Comparative case studies have been used as a means to compare different aspects of Medicaid waivers, similar to how the Independent Evaluator plans to compare PPS performance.
- The most commonly quantitative methodologies used in the peer-reviewed literature is consistent with the approaches that the Independent Evaluator plans to use in the New York State DSRIP evaluation.
- The Independent Evaluator may encounter some of the data and study design limitations, such as the lack of a comparison group that prior studies have encountered.

Peer-Reviewed Literature: Main Observations

§1115 Medicaid waiver program interventions achieving desired effects

- In Arizona, residents experienced an increase in access to home and community-based services (Weissert et al., 1997).
- In Florida, an initial period showed program effectiveness, cost savings, and utilization efficiencies (Bond & Dobeck, 2010).
- In Massachusetts, the uninsured rate decreased, especially among lower-income children (Kenney et al., 2010).
- In Oklahoma, the average medication adherence was 56% compared to the pre-intervention period when community medication adherence was nearly zero (Davis & Kendrick, 2014).
- In Wisconsin, BadgerCare showed enrollment and retention increases (Leininger et al., 2011).
- In Wisconsin, public health coverage increased up to 25% for mother-only families leaving welfare (Wolfe et al., 2006).

Relevance to New York State DSRIP

- The Independent Evaluator will ultimately compare overall performance on the New York State DSRIP program to other states in terms of access to care, health care costs, and quality of care improvements using information found in literature reviews. The Independent Evaluator will not use other state datasets for Comparative Analysis.
- Specific quantitative and qualitative variables and topics assessed in prior studies, such as access to community- based services and utilization (e.g., hospital readmissions), will also be examined in the New York State DSRIP evaluation.

§1115 Medicaid waiver program interventions not achieving desired effects

- In Maryland, Medicaid reimbursements were found to be adequate for persons living with AIDS, but expenses for persons living with HIV were significantly higher (Bartlett & Moore, 2001).
- In Massachusetts, despite the state offering substantial Pay for Performance incentives to improve quality in the initial years of implementation of the intervention, no improvement was found (Ryan & Blustein, 2011).
- In Oregon, health plan redesign resulted in disenrollment (Wallace et al., 2010), increased cost sharing on vulnerable populations (Wright et al., 2010), and limits on enrollment (Carlson et al., 2006).
- In Oregon, preventable hospitalizations increased following eligibility expansions within the Medicaid population (Saha et al., 2007).
- In Tennessee, a qualitative study found accounts of long waiting periods, increased out-of-town specialist care, problems obtaining pharmaceuticals, and general confusion about the health care system (Rocha & Kabalka, 1999).
- In Tennessee, no significant changes were noted in perinatal outcomes following the implementation of the demonstration waiver (Ray et al., 1998).

- The Independent Evaluator will compare overall performance on the New York State DSRIP program to other states in terms of access to care, health care costs, and quality of care improvements using information found in literature reviews. The IE will not be using other state datasets for Comparative Analysis.
- Specific quantitative and qualitative variables and topics assessed in prior studies, such as access barriers and utilization (e.g., preventable hospitalizations) will be examined in the New York State DSRIP evaluation.

IDENTIFYING ALL §1115 MEDICAID WAIVER EVALUATION REPORTS

The second wave of the literature review focused on identifying all publicly-available, state-sponsored §1115 Medicaid waiver evaluation reports. Since there is a statutory requirement that each state that receives a waiver is required to conduct an evaluation, the Independent Evaluator was able to locate many of these reports. However, not all evaluation reports are published as some are still pending CMS approval or the §1115 Medicaid waiver is still in progress. To collect the waiver evaluations, the Independent Evaluator employed an iterative search process. First, internet search engines were employed using the title of the waiver and search terms such as "evaluation" and "final report." Second, the Independent Evaluator searched the appropriate state government website for any reports related to the demonstration waiver. Lastly, the Independent Evaluator contacted the appropriate state agency in instances where the evaluation reports were not found. This process yielded 61 interim or final evaluation reports that were included in the repository. These evaluation reports are summarized in Table 8.

Table 8. Comparative analysis evaluation report literature review findings

§1115 Medicaid Waiver Evaluation Reports: General Findings

- The majority of evaluations concluded that the waiver programs had desirable effects on access to care and system-level cost savings. However, about one-third of the evaluations found some negative results after implementation (e.g., increased preventable hospitalizations).
- There was a wide mix of methodological approaches to the evaluations. Most of the evaluations leveraged some type of quantitative analysis. Difference-in-differences was the most popular, but various forms of regression analysis and survey results were also used. A third of the evaluations had some form of qualitative methods (e.g., case study, interviews) as part of their study design.
- Most state evaluations were performed shortly after the completion of the demonstration period. There were very few evaluations which took a longer approach and examined long-term trends on the target population(s). This limits the understanding of the longterm health outcomes of populations affected by the waiver.
- A number of limitations were noted in the evaluation designs. They include: (1) the number of states available for comparative analysis (most 1115 waiver evaluations were limited to state data from the state that they were evaluating), (2) the inability to contact patients in certain target populations (e.g., homeless) to elicit their perspectives on the care experience, (3) the lack of comparison groups, (4) the statistical power in survey analyses, (5) the data quality was lacking and missing values were prevalent, (6) the unexpected changes in state laws and other outside events occurring during the demonstration period, (7) the use of average costing methodologies that may underestimate program savings, and (8) confounds caused by the other state initiatives and/or waiver programs taking place at the same time as the §1115 Medicaid waiver.

Relation to New York State DSRIP

- The quantitative and qualitative data sources used in other §1115 Medicaid waiver evaluations are consistent with the data sources that the Independent Evaluator plans to use in the New York State DSRIP evaluation.
- The most commonly used quantitative methodologies used in prior evaluations, such as difference-in-differences and interrupted times series analysis, are consistent with the approaches that the Independent Evaluator plans to use in the New York State DSRIP evaluation.
- The Independent Evaluator may encounter some of the data and study design limitations, such as the lack of a comparison group and the lack of a long post-DSRIP evaluation period, which prior studies have encountered.

§1115 Medicaid Waiver Evaluation Reports: Main Observations

Access to Care

- In Alabama, there was an increase in eligible members since the annual renewal requirement was implemented, especially among women (Alabama Plan First).
- In Illinois, an expanded number of health care providers began providing medically-necessary care to newly covered individuals within six to twelve months of waiver operation (Illinois County Care).
- In Indiana, the evaluation found improved access to appropriate, high quality health care services for low-income individuals (Health Indiana 1.0).
- In lowa, the percentage of uninsured in the target population decreased (lowaCare).

Relation to New York State DSRIP

- The Independent Evaluator will compare overall performance on the New York State DSRIP program to other states in terms of access to care.
- Prior evaluations helped shape the Independent Evaluator's hypotheses that generally predict that the New York State DSRIP program will increase access to care.

Health Care Costs

- In Arizona, efforts to contain Medicaid costs were increasingly effective, and the care delivery system became more closely aligned with the payment system and new reimbursement rates (Arizona Health Care Cost Containment System).
- In Arizona, there was an 83% growth in overall uncompensated care costs (Arizona Health Care Cost Containment System).
- In Arkansas, there was an increase in competition among providers in the individual insurance marketplace (Arkansas Health Care Independence Program).
- In Massachusetts, there was a substantial increase in health care costs for individuals and families (MassHealth).
- In Iowa, an estimated \$209 million was saved during the five-year initial demonstration period and the first two years of the extension (Iowa Family Planning Network).
- The Independent Evaluator will compare overall performance on the New York State DSRIP program to other states in terms of health care costs.
- Prior evaluations helped shape the Independent Evaluator's hypotheses that generally predict that the New York State DSRIP program will reduce overall Medicaid spending and specifically for spending on services affected by DSRIP programs (measured by utilization decreases, as well as overall spending).

Quality of Care

- In Arkansas, low performance for outcome-based measures (i.e., adolescent and children's
 well child visits, annual dental visits, and lead screenings) were found, while high levels of satisfaction were reported by waiver recipients in both access to and quality of care (Arkansas
 Tax Equity and Fiscal Responsibility Act).
- In Georgia, following the waiver implementation, there was an increase in the age at first birth and a reduction in repeat births among women in the target population (Georgia Planning for Healthy Babies).
- In Illinois, improvements were found in the fertility rate, birth interval rate, unintended pregnancy, and Medicaid paid deliveries during the waiver's first 10 years (Illinois Healthy Women).
- In Indiana, the percentage of eligible members receiving preventive services increased (Healthy Indiana 1.0).
- In Maryland, dental service utilization among children increased (Maryland HealthChoice).

- The Independent Evaluator will compare overall performance on the New York State DSRIP program to other states in terms of quality of care outcomes.
- Prior evaluations helped shape the Independent Evaluator's hypotheses that the New York State DSRIP program will improve patient satisfaction in specific areas addressed by DSRIP projects.
- Prior evaluations helped shape the Independent Evaluator's hypotheses that the New York State DSRIP program will improve various quality measures on a patient, PPS and state-wide level.

Section VII Detailed Plans for Future Study

IMPLEMENTATION AND PROCESS STUDY FUTURE PLANS

The Independent Evaluator will continue to collect data from PPS and DSRIP-associated partners in the two remaining research cycles via key informant interviews, focus groups, and provider surveys. Additionally, the Independent Evaluator will continue secondary analysis of the CAHPS survey for each research cycle. A more detailed explanation of each activity for research cycles two and three is provided in Table 9.

Table 9. Implementation process study data collection methods with research cycle matrix

Cycle 1 (April -Cycle 2 (April -Cycle 3 (April -December 2017) December 2018) December 2019) Recruitment Population Method DSRIP Year 3 (DY3): DSRIP Year 4 (DY4): DSRIP Year 5 (DY5): Data Collection Methods April 1, 2017 -April 1, 2018 -April 1, 2019 -March 31, 2019 March 31, 2018 March 31, 2020 Telephone key informant PPS CEOs 25 interviews 25 interviews interviews Telephone key informant PPS team leaders 125 participants interviews **DSRIP-Engaged Partners** 9 focus groups In-person focus groups 8 focus groups 8 focus groups **DSRIP-Engaged Partners** Web Survey 2,400 2,400 2,400 1,500 per PPS 1,500 per PPS 1,500 per PPS **Patients CAHPS Survey**

Key Informant Interviews

- 1. In Research Cycle 2, the Independent Evaluator will schedule telephone interviews from May 2018 July 2018 with approximately 75–125 PPS staff responsible for projects which may study project start up in DY0 through early DY4. It is anticipated that 3–5 staff responsible for the projects will be selected and interviewed from each PPS.
- 2. In Research Cycle 3, the Independent Evaluator will again schedule telephone interviews from May 2019 July 2019 with 25 PPS senior leadership individuals to discuss feedback from the DY4-DY5 time period. This will function as a follow-up to their interviews regarding DY0-DY2, reported in this document.

Medicaid Managed Care Plan interviews about the DSRIP program and PPS collaboration will occur in Research Cycle 3 between May 2019 – August 2019.

Partner Focus Groups

The Independent Evaluator will organize regional focus groups in the remaining NYS regions with project partners in the NYC and Long Island areas in Research Cycle 2 from August 2018 – September 2018 and the rest of the state in Research Cycle 3 from August 2019 – September 2019.

Partner Survey

The electronic survey of approximately 2,400 engaged partners will be administered once in each of the remaining research cycles. Questions will be updated every cycle to target current issues (e.g., value based payment, sustainability).

Other Data Collection

The Independent Evaluator is surveying the Project Approval Oversight Panel in the summer of 2018, and investigating the potential of collecting data from additional patients thereafter.

TIME SERIES ANALYSIS FUTURE PLANS

The Time Series Analysis team acquired access to the Medicaid Data Warehouse (MDW) data and will acquire Statewide Planning and Research Cooperative System (SPARCS) data in early 2018. This team will begin its focus by performing a descriptive analysis of the performance metrics used by the NYS DOH. This focus will provide a comprehensive view of how these metric outcomes changed for the New York State Medicaid population attributed to the DSRIP program over time. Then, in order to find a suitable comparison group, all-payer data from the SPARCS will be matched to the MDW data to study the trends in both the Medicaid and non-Medicaid population in the pre- and post-DSRIP periods. If a proper comparison group is not statistically established, then further efforts will be made to create such a group (e.g., synthetic control) for, at least, a subset of the research questions. This process will provide the Time Series Analysis team with a proper understanding of what analytical method can be used to answer each research question. Findings from these analyses will motivate a deeper dive into the mechanisms by which the DSRIP program is generating the observed changes.

COMPARATIVE ANALYSIS FUTURE PLANS

The Comparative Analysis team aims to contextualize the results of the New York State DSRIP program with findings from other states' DSRIP waivers. As previously described in this report, the Comparative Analysis team began with a comprehensive literature review of all peer-reviewed studies using §1115 Medicaid waiver data and publicly-available DSRIP program evaluation reports. This process allowed the Independent Evaluator to compare and contrast the waiver designs in each state. The Independent Evaluator then catalogued the main findings from each DSRIP program waiver in terms of whether the waiver was successful in achieving its stated objectives or goals. At the culmination of the New York State DSRIP program evaluation, the Comparative Analysis team will compare findings from the literature, qualitatively, with findings of the New York State DSRIP program, which aims to achieve its "primary goal of reducing avoidable hospital use by 25% over five years" (NYS DSRIP Evaluation Plan). This analysis will be completed following all data collection and analysis for all five demonstration years of the New York State DSRIP program to ensure the most complete and current results. The Independent Evaluator will not be performing specific analyses on non-New York State datasets beyond performing a comparative literature review.

TIMELINE

A timeline of the evaluation project activities is shown in Table 10.

Table 10. Evaluation project milestones

Milestone	Target Date
Implementation and Process Study	
Finalize key informant interview guides	4/28/17
Introduce recruitment of key informant interviews to PPS staff via email blast	5/22/17
Introduce web-based survey to PPS staff and DSRIP associated providers via email	6/9/17
Begin scheduling of key informant interviews via telephone and hold key informant interviews	6/14/17
Finalize focus group guides	7/30/17
Finalize content of web-based survey for DSRIP associated providers	7/30/17
Introduce recruitment of DSRIP-associated providers for focus groups via email	8/14/17
Begin analyses of incoming data from focus groups, key informant interviews, surveys with DSRIP-associated providers, and surveys with patients	8/15/17
Complete research cycle 1 key informant interviews with PPS staff	9/22/17
Launch web-based survey for DSRIP associated providers	9/25/17
Launch focus groups at 8 PPS sites with DSRIP-associated providers	11/9/17
Complete cycle 1 web-based survey with PPS staff/community partners	12/21/17
Complete evaluation year 1 focus groups with DSRIP-associated providers	12/21/17
Complete analyses of cycle 1 data	2/28/18
Prepare for launch of cycle 2 research activities (key informant interviews, focus groups, and surveys)	4/15/18
Prepare for launch of cycle 3 research activities (key informant interviews, focus groups, and surveys)	4/15/19
Time Series Analysis	
Establish HCS accounts for all DSRIP evaluators	6/29/17
MDW data training	8/9/17
Acquire access to MDW data	1/31/18
Begin descriptive analysis for Time Series analysis	2/28/18
Gain access to MDW data (through most recent data available) via VPN provided by NYS DOH (phase 2)	3/1/18
Gain access to MDW "sandbox" for availability of SPARCS, MDW, and DSRIP on same framework	4/19/18
Clean available datasets conforming to research questions	4/30/18
Gain access to SPARCS data	6/30/18
Obtain descriptive statistics and trend of main indicators pertaining to research questions	6/30/18
Obtain results for Time Series Research Questions 1-6 to be included in Interim Evaluation report and Statewide Annual report due at end of March 2018	8/31/18
Begin data collection for cost effectiveness analysis	1/1/19
Obtain results for Time Series analysis based on additional years of data	8/31/19
Preliminary results for cost effectiveness analysis	1/1/20
Final results for Time Series analyses	8/30/20
Conclusions for cost effectiveness analysis	8/30/20

Appendix A

Implementation and Process Study Methods and Tools

PPS EXECUTIVE TEAM (KEY INFORMANT) INTERVIEW GUIDE

Introductory Script (to be read to all informants prior to the interview):

Thank you for taking the time to speak with me today. My name is _____, and I am a member of the NY DSRIP Independent Evaluation team. As you know from the email and the webinar materials, I have been asked to interview PPS administrators to discuss the history of the PPS formation as well as the successes, and challenges with the initiative.

We know your PPS has extensive reporting requirements to DOH. To that end, from publicly facing sources like your website, the PPS applications, and Independent Assessor posted quarterly reports we have collected a summary of your existing projects and would like to just quickly go over them so you can confirm the information we have is accurate and up-to-date. [Insert detailed PPS projects summary and other relevant information (geographic areas serving, major changes to projects, other known issues)].

Before I pose any questions, I want to go over a few guidelines that will help us complete the discussion:

- Please keep in mind that that there are no right or wrong answers. We are seeking your candid feedback on the initiative so far.
- Because we are on the phone, please state your name before you answer a question for the first time. This may feel awkward, but it will be easier as we proceed.
- I am having our discussion recorded. As a backup to the tape, I am having a research assistant, Melissa, listen in with me and take notes.

Now let's begin with introductions so I know who is here. Can all of you provide your names and your titles with a short description of what you do at the PPS?

Have I missed anything about your PPS that I should know before we get started?

Great, now I will go through the questions we have prepared.

1. How was your PPS initially formed? (If knowledgeable about PPS development)

- a. Probe: Who were the key champions (people, organizations) of the PPS in the early stages of formation?
- b. Probe: Who developed or contributed to the DSRIP application process (e.g., staff, consultants, community partners)?
- c. Probe: What worked well about the formation?
- d. Probe: What about project selection?

OR

1. How did you get involved with DSRIP teams or projects? (If not knowledgeable about PPS development)

- a. Probe: Please tell us about your involvement in any board, clinical, project workgroups, regional community partner committees, etc.
- b. Probe: Who are the champions and key members/member organizations of these committees?

2. What are some of the biggest challenges your PPS experienced during the early phases (e.g., years 0-2) of project implementation?

- a. Probe: Specific project workflows, engagement with community partners, communication approaches, staff buyin, etc.
- b. Probe: Did project(s) start dates get delayed or hit major road blocks along the way? If so, please describe them.
- c. Probe: Are projects not meeting speed and scale targets? If not, why?
- d. Probe: In your view, which projects require more resources to operate?
 - i. Why do you think it's these projects in particular?
- e. Probe: What type of resources are the projects lacking?
 - i. e.g., Staffing, Leadership, Community Networks, IT, Physical Infrastructure, Clinical Knowledge, Patient-related needs

3. What are some of the biggest successes that you have experienced during the early phases (e.g., years 0-2) of project implementation?

- a. Probe: Community needs assessment and the application process?
- b. Probe: Specific project workflows, engagement with community partners, communication approaches, etc.
- c. Probe: Project innovations? If yes, please describe them.
- d. Probe: Projects are meeting or exceeding speed and scale targets? If so, why?

4. Please tell us about PPS committees that are related to its governance and about the effectiveness of your PPS' committees in meetings its goals and objectives.

- a. Probe: Have you restructured your committees since formation? From project workgroup to performance focused workflow?
- b. How are these committees used to communicate important information about the PPS or projects?
- c. Probe: Who are the champions and key members/member organizations of these committees?
- d. Probe: What has been challenging with regards to the committees?
- e. Probe: What is the relationship between the PPS and external committees, such as associated hospitals?

5. What data are being collected by your PPS and/or NYS DOH that you believe to be the most important to understanding overall DSRIP program success?

- a. Probe: What are the least important aspects of data collection?
- b. Probe: How is performance communicated to PPS staff? Community providers?
- c. Probe: What about reporting: Partner to PPS reporting, PPS to state reporting?

6. From your perspective, how valuable is the account support provided by NYS and its consultants? How valuable is the project implementation support?

- a. Probe: What are the most effective types of TA provided to your PPS?
- b. Probe: What are the least effective types of TA provided to your PPS?
- c. Probe: Who is included in regional and/or statewide DSRIP meetings from your PPS?

7. In your view, has DSRIP changed the health care system??

- a. Probe: If yes, for whom? How?
- b. Probe: If no, why do you think it has remained the same?

8. Is there anything you would like to comment on regarding DSRIP in general?

- a. Probe: What would you ask another PPS if you could?
- b. Probe: Suggestions for improvement
- c. Probe: Anything we have not touched on in this interview

Should you have any questions about this interview or evaluation, please feel free to contact Diane Dewar, Principal Investigator for this study at ddewar@albany.edu.

PROJECT-ASSOCIATED PROVIDERS FOCUS GROUP TOPIC GUIDE

- 1. Engagement of providers with DSRIP activities and projects
- 2. DSRIP transformation of professional responsibilities
- 3. Integration of projects with other projects or services received by patients
- 4. Characterization of DSRIP to-date
- 5. The effect of other ongoing health care initiatives on DSRIP, such as NY Prevention Agenda and the ACA
- 6. Progress of the DSRIP projects and impact on provider's area of work
- 7. Factors that influence achieving Pay for Performance
- 8. Barriers that influence achieving Pay for Performance
- 9. Value based payment
- 10. Characterization of the contractual and financial arrangements
- 11. Other changes recommended

PARTNER SURVEY: SAMPLING, RESPONSE RATES, ANALYTIC METHODS

Partner Survey Sampling and Response Rates

An initial sample of engaged and not engaged providers was developed from the Point In Time Demonstration Year 2 files for each PPS. Some providers appeared in samples for multiple PPS and some for only one. Each PPS was sent a list of providers associated with their PPS and were asked to first update the status for providers (i.e., change status to "not engaged" if a provider was no longer involved, or change to "engaged" if a provider was now participating in a project), and second to provide contact and engagement status information for any new providers. All but one of the PPS responded and returned an updated list of engaged providers; providers for the remaining PPS were determined by the Demonstration Year 2 list alone.

Contacts for each PPS were asked to alert their provider network to the survey and encourage its completion. In total, survey links were sent to 2,794 e-mail addresses. The research team sent each engaged provider an e-mail asking the provider to complete the Partner Survey, with a personalized link to the survey in Qualtrics. As some partners were part of several PPS, they received multiple requests for the survey.

Providers could be individual practitioners or organizations. In some cases, only one e-mail address was available for multiple providers (e.g., a medical practice may have provided one contact e-mail for multiple staff doctors, or a community-based organization with multiple involved staff members may have used one business e-mail). Further, some individuals received a survey link associated with their e-mail address but subsequently forwarded it to another member of their organization. As such, there is not a direct correspondence between e-mail address and individual respondents. The survey was originally available for four weeks, then was extended for three more. As an incentive to complete the survey, participants were informed that three respondents would win a \$100 Amazon gift card.

Potential participants who had not completed the survey were sent eight (8) reminders over the response period; some PPS also elected to send reminders of their own. A total of 1,235 completed surveys from unique individuals were returned from all PPS. A total of 315 respondents opened the survey but did not answer any questions, and 23 more were determined to be unusable for various reasons (e.g. two participants did not give a coherent response in any text box, including their name). These methods resulted in 897 usable responses, for a final response rate of 32%.

Partner Survey Data Preparation

Survey responses were first deduplicated. About 100 respondents opened the survey multiple times. In the case of multiple responses from one person (same name and organization provided), the older and/or more complete response was kept (e.g., if a participant opened the survey but did not complete anything past entering his or her name, and then reopened the survey later and completed it, the second entry was used), but if they completed similar amounts each time, the first

Appendix A

response was kept. If a participant had multiple survey entries and responded about different projects in each, the first three evaluations were kept. For example, if a participant responded about two DSRIP program projects in one survey entry, then retook the survey and answered regarding another different project, the responses from the second survey were added to those of the first, and the second survey record was deleted.

In total, there were 897 usable, unique responses to the survey, where participants entered their name or the name of their organization or their title, noted in how many DSRIP PPS they were involved, and selected a first project for evaluation. A total of 32 of these participants then did not answer any further questions but were not excluded from analyses.

Response data quality was then examined by PPS and project. Of the 1,753 potentially useable individual project evaluations received, 262 (15%) were for a project that had not been implemented in the selected PPS. For example, across the sample, 70 responses were received for Project 2.a.ii in PPS that were not implementing 2.a.ii.

When possible, these responses were recoded. Respondents were first assumed to have selected the correct PPS but the wrong project: if the organization or PPS was involved in a similar project in the same subdomain or grouping, the response was recoded. If the selected PPS was not involved in a similar project but the participant had also responded about another PPS which was involved in that project, the PPS name was corrected. Using these procedures, 202 responses were corrected. A total of 61 responses were unable to be recoded and so these were not included in any further analyses, leaving 1,691 project-based responses, inclusive of all 25 PPS.

Several errors were especially common. Many participants seemed to confuse projects 2.a.i and 2.a.ii; 2.b.ii, 2.b.vi, and 2.b.v; 2.c.i, 2.c.ii, and 2.d.i; 3.b.i, 3.b.i, 3.b.ii, 3.c.i, and 3.c.ii (particularly as the descriptors for these projects are the same); and 4.a.i and 4.a.iii. However, many other errors did not have any discernable pattern. Respondents should thus not be assumed to be aware of the formal name or code for projects in which they are involved.

The final set of 1,691 project-based evaluations included all 25 PPS across New York State. There was a wide range in the number of responses a PPS received. On average, PPS received about 68 responses each (standard deviation of 37). Two PPS (Bronx Lebanon and NY Presbyterian) received fewer than 20 evaluations; three PPS (Central NY, Finger Lakes, and HHC) received over 120 evaluations.

Participants provided responses for approximately 38 of the 44 possible DSRIP program projects. Projects 3.b.ii, 3.d.i, 3.h.i, 4.c.iii, and 4.c.iv were not implemented in any PPS; additionally, no evaluations were received for 4.c.i, which was only implemented in one PPS.

Partner Survey Respondent Characteristics

The majority of the 897 respondents were administrators, project managers, or directors of various types (41%) and program executives (vice presidents, presidents, executive directors, or C-level executives, 40%) (see Figure 7). Approximately 10% of respondents were clinical practitioners (whether doctors, nurses, social workers, or clinical supervisors). About 5% were

administrative assistants, coordinators, or office managers; 1% were county commissioners or deputy commissioners; and 3% were other types of workers (consultants, board members, data analysts and researchers, and IT support). Three participants did not provide their position.

Respondents reported working at 796 different organizations. The largest group of respondents (28%) were part of community-based organizations, followed by individuals working in a practitioner's office or practicing themselves (15%)

Figure 7. Partner survey respondent characteristics

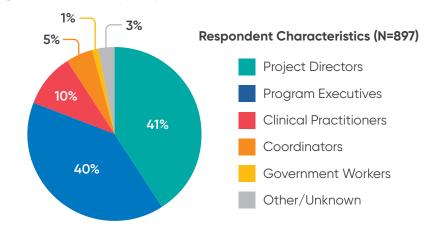
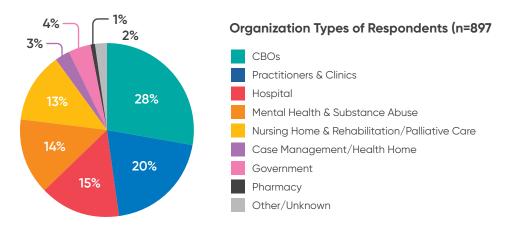


Figure 8. Organization types of partner survey respondents



or a clinic (5%) (see Figure 8). Fifteen percent worked at a hospital, 13.5% at an organization focusing on mental health or substance use, and 13% at a nursing home, rehabilitation facility, or hospice/palliative care center. The remaining participants were part of case management or health home programs (3%), city or county government departments (e.g., Albany County Department of Health, 4%, pharmacies (0.6%), or part of some other organization (e.g., nurse staffing agency, insurance company, or could not be classified, 2%). Two participants did not provide their organization.

One-third (33%) of the 897 respondents reported being involved in only one PPS, one quarter (24%) were involved in two, and 43% were involved in at least three. In evaluative responding, though, most participants (80.5%) chose to respond about projects within just one PPS; 12% responded about projects in two different PPS and 7% responded about projects in three different PPS. Regardless of PPS, 41% of participants responded about their involvement in one project, 22% about two different projects, and 37% about three.

Partner Survey: Instrument

- 1. What is your name?
- 2. What is the name of your organization?
- 3. What is your position?
- 4. How many PPS-selected DSRIP projects are you involved with and knowledgeable about?

If you are involved with more than 3 DSRIP related projects at your organization, please think of the 3 projects with which you are most involved. The project(s) may be within one PPS or several projects across multiple PPS depending on your service area and involvement.

5. Using the drop-down menu below, please indicate the first project you are involved with and the corresponding PPS.

PPS:

Project:

6. Please indicate your level of satisfaction with <Project> implementation as related to working with <PPS>.

Very satisfied (1)

Satisfied (2)

Neither satisfied nor dissatisfied (3)

Dissatisfied (4)

Very dissatisfied (5)

Not applicable (6)

I don't know (7)

7. Please indicate your level of satisfaction with the current operation of <Project> as related to working with <PPS>.

Very satisfied (1)

Satisfied (2)

Neither satisfied nor dissatisfied (3)

Dissatisfied (4)
Very dissatisfied (5)
Not applicable (6)
I don't know (7)

8. How satisfied were you with <Project> operations at your organization overall during Demonstration Years 0-2 (2014-2017)?

Very satisfied (1)

Satisfied (2)

Neither satisfied nor dissatisfied (3)

Very dissatisfied (4)

Not applicable (5)

I don't know (6)

9. What would you change about current operation of the project within <PPS>?

10. What would you change about the current operation of the project within your organization?

11. Please indicate the degree of change to which you perceive the project is changing patient care.

Very positive change (1)

Positive change (2)

No change (3)

Negative change (4)

Very negative change (5)

12. How effective do you perceive the project to be at meeting its intended goals currently?

Extremely effective (1)

Very effective (2)

Moderately effective (3)

Slightly effective (4)

Not effective at all (5)

I don't know (6)

13. Why do you feel this way?

<Items 5 through 13 were repeated up to three times for respondents participating in more than one project.>

14. One focus of DSRIP was to integrate primary, specialty, and behavioral health care. Has the clinical care at your organization changed since DSRIP was initiated?

Yes, very positive change (1)

Yes, positive change (2)

No change (3)

No, negative change (4)

No, very negative change (5)

I don't know (6)

Not applicable, my organization does not provide clinical services (7)

No (2)

I don't know (3)

15. Have you observed any of the following benefits to primary care and behavioral health services integration? (Please select all that apply). Improved communication leading to more coordinated care (1) Improved recognition of mental health disorders (2) Increased primary care providers (PCPs) use of behavioral health intervention (3) Decreased stigma of mental health conditions (4) Improved understanding of patient needs (5) Improved patient and provider satisfaction (6) Improved clinical outcomes (7) Reduced avoidable hospital utilization (8) Increased productive capacity (9) Reduced medical costs (10) Other (please specify): (11) N/A (12) 16. In your view, are patients experiencing better care since the launch of DSRIP? Yes, very positive change (1) Yes, positive change (2) No change (3) No, negative change (4) No, very negative change (5) I don't know (6) 17. Another focus of DSRIP was population health interventions. Do you believe DSRIP has changed any aspect of population health within your service area? Yes, very positive change (1) Yes, positive change (2) No change (3) No, negative change (4) No, very negative change (5) I don't know (6) 18. Has DSRIP changed the way your organization provides services? Yes (1) No (2) I don't know (3) 19. If yes, in what ways has DSRIP changed the way your organization provides services? 20. How do you characterize your understanding of value based payment? Very knowledgeable (1) Somewhat knowledgeable (2) Only at a little knowledgeable (3) Not at all knowledgeable (4) 21. Have you made changes to your practice or organization to prepare for value based payment? Yes (1) No (2) I don't know (3) 22. Do you require more resources/knowledge for the shift to value based payment? Yes (1)

Extremely effective (1)

Very effective (2)

Moderately effective (3)

Slightly effective (4)

Not effective at all (5)

24. In what ways is it effective or ineffective?

25. Please share any suggestions you may have for state-level changes or program improvements for DSRIP as a whole.

Partner Surveys Received by PPS and Project

Table 11 shows the number of partner surveys received from each PPS according to DSRIP project.

Table 11. Partner surveys received by PPS and project

PPS	Project	N Evaluations Received	% of PPS's Responses
Adirondack Health Institute, Inc.	2.a.i Create Integrated Delivery Systems that are focused on Evidence-Based Medicine / Population Health Management	25	23.8
(55 entities responded producing 105	2.a.ii Increase certification of primary care practitioners with PCMH certification and/or Advanced Primary Care Models (as developed under the NYS Health Innovation Plan (SHIP))	14	13.3
project responses)	2.a.iv Create a medical village using existing hospital infrastructure	3	2.9
	2.b.viii Hospital-Home Care Collaboration Solutions	13	12.4
	2.d.i Implementation of Patient Activation Activities to Engage, Educate and Integrate the uninsured and low/non-utilizing Medicaid populations into Community Based Care	12	11.4
	3.a.i Integration of primary care and behavioral health services	10	9.5
	3.a.ii Behavioral health community crisis stabilization services	6	5.7
	3.a.iv Development of Withdrawal Management (e.g., ambulatory detoxification, ancillary withdrawal services) capabilities and appropriate enhanced abstinence services within community-based addiction treatment programs	1	1
	3.g.i Integration of palliative care into the PCMH Model	8	7.6
	4.a.iii Strengthen Mental Health and Substance Use Infrastructure across Systems	9	8.6
	4.b.ii Increase Access to High Quality Chronic Disease Preventive Care and Management in Both Clinical and Community Settings (Note: This project targets chronic diseases that are not included in domain 3, such as cancer)	4	3.8
	Total	105	100
Advocate Community	2.a.i Create Integrated Delivery Systems that are focused on Evidence-Based Medicine / Population Health Management	23	48.9
Providers, Inc. (40 entities responded producing 47	2.a.iii Health Home At-Risk Intervention Program: Proactive management of higher risk patients not currently eligible for Health Homes through access to high quality primary care and support services	3	6.4

project responses)

^{*}These respondents listed a project their PPS was not participating in, and the Independent Evaluation analysis team did not correct for this error for two PPS projects before this report went to publication. The redaction of these two projects would have minimally reduced the response from 1,691 to 1,689 total project responses. These participants are included in the project-specific analyses for this report, but will be excluded from project-specific analyses in future reports.

CAHPS SURVEY INSTRUMENT

CAHPS® Clinician & Group Survey

Version: 3.0

Population: Adult

Language: English

Notes

- References to "this provider" rather than "this doctor:" This survey uses "this provider" to refer to the individual specifically named in Question 1. A "provider" could be a doctor, nurse practitioner, physician assistant, or other individual who provides clinical care. Survey users may change "provider" to "doctor" throughout the questionnaire. For guidance, please see Preparing a Questionnaire Using the CAHPS Clinician & Group Survey.
- Supplemental items: Survey users may add questions to this survey. Please visit the CAHPS Web site to review supplemental items developed by the CAHPS Consortium and descriptions of major item sets.

For assistance with this survey, please contact the CAHPS Help Line at 800-492-9261 or cahps1@westat.com.

Cohps File name: adult-eng-cg30-2351a.docx Last updated: July 1, 2015

Instructions for Front Cover

- Replace the cover of this document with your own front cover. Include a user-friendly title and your own logo.
- Include this text regarding the confidentiality of survey responses:

Your Privacy is Protected. All information that would let someone identify you or your family will be kept private. {VENDOR NAME} will not share your personal information with anyone without your OK. Your responses to this survey are also completely confidential. You may notice a number on the cover of the survey. This number is used only to let us know if you returned your survey so we don't have to send you reminders.

Your Participation is Voluntary. You may choose to answer this survey or not. If you choose not to, this will not affect the health care you get.

What To Do When You're Done. Once you complete the survey, place it in the envelope that was provided, seal the envelope, and return the envelope to [INSERT VENDOR ADDRESS].

If you want to know more about this study, please call XXX-XXX-XXXX.

Instructions for Format of Questionnaire

Proper formatting of a questionnaire improves response rates, the ease of completion, and the accuracy of responses. The CAHPS team's recommendations include the following:

- If feasible, insert blank pages as needed so that the survey instructions (see next page) and the first page of questions start on the right-hand side of the questionnaire booklet.
- Maximize readability by using two columns, serif fonts for the questions, and ample white space.
- Number the pages of your document, but remove the headers and footers inserted to help sponsors and vendors distinguish among questionnaire versions.

Additional guidance is available in **Preparing a Questionnaire Using the CAHPS Clinician & Group Survey**.

Survey Instructions

Answer each question by marking the box to the left of your answer.

You are sometimes told to skip over some questions in this survey. When this happens, you will see an arrow with a note that tells you what question to answer next, like this:

\boxtimes	Yes →	If Yes,	go	to #1	on	page	1
	No						

Your Provider		
1.	Our records show that you got care from the provider named below in the last 6 months.	
	Name of provider label goes here	
	Is that right?	
	¹ Yes ² No → If No, go to #23 on page 4	
pro Plea	e questions in this survey will refer to the vider named in Question 1 as "this provider." ase think of that person as you answer the vey.	
2.	Is this the provider you usually see if you need a check-up, want advice about a health problem, or get sick or hurt? ' Yes ' No	
3.	How long have you been going to this provider?	
	Less than 6 months Less than 6 months At least 6 months but less than 1 year At least 1 year but less than 3 years At least 3 years but less than 5 years years or more	

Your Care From This Provider in the Last 6 Months

These questions ask about **your own** health care. Do **not** include care you got when you stayed overnight in a hospital. Do **not** include the times you went for dental care visits.

4. In the last 6 months, how many times did you visit this provider to get care for

	yourself?
	None → If None, go to #23 on page 4
	☐ 1 time ☐ 2
	□ 3 □ 4
	5 to 9
	10 or more times
5.	In the last 6 months, did you contact this provider's office to get an appointment for an illness, injury, or condition that needed care right away?
	¹ Yes ² No → If No, go to #7

6.	In the last 6 months, when you contacted this provider's office to get an appointment for care you needed right away , how often did you get an appointment as soon as you needed?
	¹☐ Never ²☐ Sometimes

³ ☐ Usually ⁴ ☐ Always

	In the last 6 months, did you make any appointments for a check-up or routine care with this provider?	11.	In the last 6 months, how often did this provider explain things in a way that was easy to understand?
i	¹ Yes ² No → If No, go to #9 In the last 6 months, when you made an appointment for a check-up or routine care with this provider, how often did you	12.	¹ Never ² Sometimes ³ Usually ⁴ Always In the last 6 months, how often did this
	get an appointment as soon as you needed? Never		provider listen carefully to you? Never
]	In the last 6 months, did you contact this provider's office with a medical question during regular office hours? ¹ □ Yes ² □ No → If No, go to #11	13.	In the last 6 months, how often did this provider seem to know the important information about your medical history? Never Sometimes Usually
1	In the last 6 months, when you contacted this provider's office during regular office hours, how often did you get an answer to your medical question that same day? Never		⁴ □ Always

best provider possible, what number would you use to rate this provider?
0 Worst provider possible 1 2 3
☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 Best provider possible
 19. In the last 6 months, did you take any prescription medicine? ¹ Yes ² No → If No, go to #21
20. In the last 6 months, how often did you and someone from this provider's office talk about all the prescription medicines you were taking? 1 Never 2 Sometimes 3 Usually 4 Always

Clerks and Receptionists at This Provider's Office 21. In the last 6 months, how often were clerks and receptionists at this provider's office as helpful as you thought they should be? ¹ Never ² Sometimes ³ Usually ⁴ ☐ Always 22. In the last 6 months, how often did clerks and receptionists at this provider's office treat you with courtesy and respect? ¹ Never ² Sometimes Usually ⁴ ☐ Always

About You		
23. In general, how would you rate your overall health?		
Excellent Cood Fair Poor		
24. In general, how would you rate your overall mental or emotional health?		
Excellent Cood Fair Poor		
25. What is your age? 1 18 to 24 2 25 to 34 3 35 to 44 4 45 to 54 5 55 to 64 6 65 to 74 7 75 or older		
26. Are you male or female?		
¹☐ Male 2☐ Female		

27.	What is the highest grade or level of school that you have completed?	30. Did someone help you complete this survey?
	 Sth grade or less Some high school, but did not graduate High school graduate or GED Some college or 2-year degree 4-year college graduate 	¹ Yes ² No → Thank you. Please return the completed survey in the postage-paid envelope.
	6 More than 4-year college degree	How did that person help you? Mark one or more.
28.	Are you of Hispanic or Latino origin or descent? 1 Yes, Hispanic or Latino 2 No, not Hispanic or Latino	Read the questions to me The second of the questions into me Read the questions into me Translated the questions into my language
29.	What is your race? Mark one or more. White Black or African American Asian Native Hawaiian or Other Pacific Islander American Indian or Alaska Native Other Other	⁵ Helped in some other way

Thank you.

Please return the completed survey in the postage-paid envelope.

Appendix B

Time Series Analysis Methods

DSRIP DOMAINS AND PROJECTS

The New York State DSRIP program is a five-year program spanning from 2015 to 2020 with one year (2014) for planning, assessment, and project development for PPS. Years 1 through 5 (2015-2020) are for project implementation, milestone achievements, and performance evaluations. The PPS were required to conduct community needs assessments which allowed them to develop project plans aimed to meet specified metrics and milestones. PPS payments are then disbursed biannually based on their performance on these metrics and milestones. The eligible providers within a PPS collaborated and pooled their expertise to achieve these milestones. In DSRIP Year 0, each PPS submits the project plan, which is composed of at least five, but not more than 11 projects, from a predetermined list of projects. The projects are grouped into four domains based on their milestones and impacts. Table 12 lists a comprehensive set of domains and projects addressed by the Independent Evaluator.

Table 12. List of domains and projects

Project Numbers	Description
	Domain 2: System Transformation Projects
A.	Creating Integrated Delivery Systems
2.a.i	Create Integrated Delivery Systems that are focused on Evidence–Based Medicine / Population Health Management
2.a.ii	Increase certification of primary care practitioners with PCMH certification and/or Advanced Primary Care Models (as developed under the NEW YORK STATE Health Innovation Plan (SHIP))
2.a.iii	Health Home At-Risk Intervention Program: Proactive management of higher risk patients not currently eligible for Health Homes through access to high quality primary care and support services
2.a.iv	Create a medical village using existing hospital infrastructure
2.a.v	Create a medical village/alternative housing using existing nursing home infrastructure
B.	Implementing Care Coordination and Transitional Care Programs
2.b.i	Ambulatory Intensive Care Units (ICUs)
2.b.ii	Development of co-located primary care services in the emergency department (ED)
2.b.iii	ED care triage for at-risk populations
2.b.iv	Care transitions intervention model to reduce 30-day readmissions for chronic health conditions
2.b.v	Care transitions intervention for skilled nursing facility (SNF) residents
2.b.vi	Transitional supportive housing services
2.b.vii	Implementing the INTERACT project (inpatient transfer avoidance program for SNF)
2.b.viii	Hospital-Home Care Collaboration Solutions
2.b.ix	Implementation of observational programs in hospitals
C.	Connecting Settings
2.c.i	Development of community-based health navigation services
2.c.ii	Expand usage of telemedicine in underserved areas to provide access to otherwise scarce services

ANALYTIC APPROACH

The Time Series Analysis team is studying the statistical impact of the DSRIP program on system transformation, health care quality, population health, and health care costs by formulating a range of research questions and hypotheses, detailed in Table 13.

Table 13. Research questions and hypotheses

Research Question	Hypotheses	
1. To what extent did PPS achieve health care system transformation, including increasing the availability of behavioral health care?	 Health care service delivery will show greater integration. Health care coordination will improve. Primary care utilization will show a greater upward trend. Expenditures for primary care services will increase. Utilization of, and expenditures for, behavioral health care service will increase. Expenditures for emergency department and inpatient services will decrease. 	
2. Did health care quality improve as a result of clinical improvements in the treatment of selected diseases and conditions?	Through clinical improvements implemented under the DSRIP program, health care quality in each of the following areas will increase: a. Behavioral health	

Research Question	Hypotheses
3.Did population health improve because of implementation of the DSRIP program?	 Promote mental health and prevent substance abuse (MHSA) Prevent chronic diseases Prevent HIV and STDs Promote healthy women, infants and children
4. Did utilization of behavioral health care services increase as a result of the DSRIP program?	1. Utilization of, and expenditures for, behavioral health care service will increase.
5. Was avoidable hospital use reduced because of the DSRIP program?	 Avoidable hospital discharges and emergency department utilization will be reduced. Costs associated with hospital inpatient and ED services will show reductions or slowed growth.
6. Did the DSRIP program reduce health care costs?	Health care expenditures associated with services under the DSRIP program will show a reduction or slower growth

METRICS AND DATA

The metrics used to study these research questions are primarily the ones that are chosen by New York State to analyze the performance of the PPS and some metrics that are independently calculated by the Time Series Analysis team from the available datasets. The independently created metrics will follow the specifications of the NYS DOH-created ones as closely as possible, given the availability of data. The Medicaid Data Warehouse (MDW) will act as the main source for the Fee-For-Service claims and Managed Care encounter data. All-payer hospital discharge data from the Statewide Planning and Research Cooperative System (SPARCS), and zip-code level population characteristics from the American Community Survey (ACS) will be used to create a comprehensive dataset that can provide:

- · detailed information about claims and encounters of patients affected by the DSRIP program
- a comparison group to validate the effects of the DSRIP program
- detailed hospital and regional characteristics that can differentiate between impacts on PPS and its providers from varied socio-economic and geographic backgrounds

ANALYTIC METHOD

As shown in the literature, it is very important to disentangle the effect of the DSRIP program from the other health reforms that may directly affect most of the performance measures. Moreover, the Time Series Analysis team's research questions are targeted at metrics that vary from the individual level to an aggregate state level. This motivated the team to adopt an analytical strategy that can estimate the impact of the DSRIP program on any of the performance metrics at any aggregation level of available data. The model is a modified form of the Difference-In-Difference (DID) framework that has been widely used for program evaluation studies. The modified DID model is robust to availability of different levels of data (individual level, zip-code level, or state level) or to availability of a suitable control group.

When the available data are at the individual level and a suitable comparison group is available, the model takes the following form:

$$Y_{ijkt} = \beta_0 + \beta_1 DSRIP_{it} + \beta_2 POST_t + \beta_3 DSRIP_{it} \times POST_t + \beta_4 Time + \alpha'PPS_{ij} + \delta'X_{ijt} + \gamma'Y_{jt} + u_{ijkt}$$
 where:

 Y_{ijkt} = Occurrence of potentially preventable hospitalization

 $DSRIP_{it}$ = Attribution to DSRIP

 $POST_{t}$ = Post DSRIP time periods

Time= Time dummies β_3 = Policy effect PPS_{ii} = PPS Indicator

 X_{ii}, Y_{ii} = Individual and hospital level characteristics

 u_{iikt} = Nested error component

 Y_{ijkl} can be any performance metric at the individual level, $DSRIP_{ii}$ denotes exposure to the DSRIP program for individual i at time t denotes that the time period is after DSRIP Year 0. β_{j} captures the impact of the DSRIP program on a specific performance metric Y_{ijkl} after controlling for time trends (Time) and other time-varying individual and hospital level characteristics. A summary of individual and hospital level characteristics to be used as controls is given in Table 14. Effects of individual level characteristics (X_{ijl}) such as race/ethnicity, gender, etc. that will be captured by the coefficient δ will provide important insights into the disparities that may be present in the metric we are studying. For several metrics, such as Domain 4 population metrics, the Time Series Analysis team may have data only at the PPS or even at the state level, with no recognizable comparison groups. In such a case, the model gets simplified into an Interrupted Time Series (ITS) framework by simply removing the dimensions and variables not available in the dataset:

$$Y_{it} = \beta_0 + \beta_2 POST_t + \beta_3 Time + \alpha' PPS_i + \delta' X_{it} + u_{it}$$

Here i is the lowest level of available data, and β_2 will capture how the metric Y_{it} has changed after the DSRIP program when other secular trends and characteristics have been controlled for. Figure 9 shows the types of impacts, including changes in slope and intercept, that can be captured by the ITS framework. The result from an ITS estimation on the Texas 1115(a) waiver evaluation is given in Figure 10. Here β_2 captures the change in slope of the fitted line which is attributable to the impact of the DSRIP program, after controlling for time trends and effect of other covariates (X_{ii}) . Section V provides a comprehensive literature review of studies regarding the effects of public and private health insurance programs on metrics similar to the DSRIP project goals. The review underscores the need for the analytical approach discussed in this section to handle the complications that may arise.

Table 14. Characteristics

Patient Level Age, Gender, Race/Ethnicity, Dual Eligibility, Length of Stay, Severity of Illness, Insurance Characteristics Status, Disposition, Weekend Discharge, Service Category, Accommodation, Mortality,

BP, Heart Rate.

Hospital Characteristics Accommodation, Mortality rate, Health Service Area, Number of Beds, Percentage

Medicaid.

Zip-code level ZIP level income, Health insurance statistics, Poverty Rate, Labor Market Conditions,

Characteristics Percentage Immigrants, Availability of food.



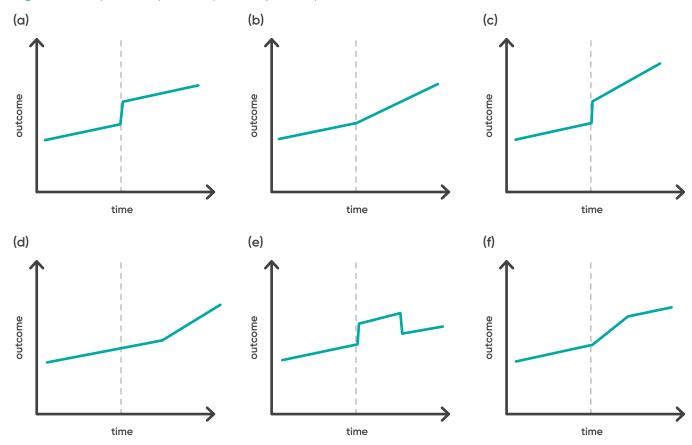
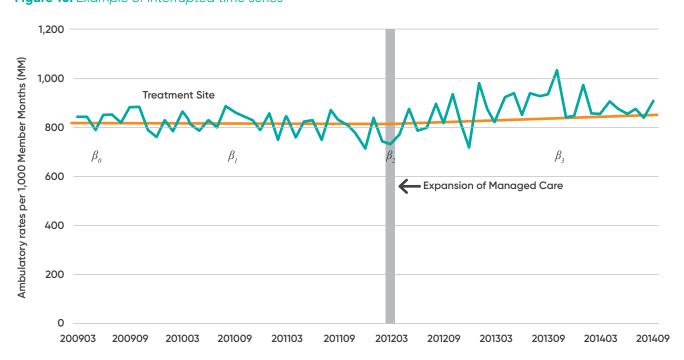


Figure 10. Example of interrupted time series²⁸



Appendix C

Comparative Analysis Methods

In the sections that follow, the Independent Evaluator presents their methodological approach to the Comparative Analysis. The Comparative Analysis Team anticipates completing initial modeling by the fall of 2018.

RESEARCH QUESTIONS

The Comparative Analysis team will address the evaluation research questions with a specific emphasis on the effects of type of projects adopted by the PPS, the relative effectiveness of specific strategies employed within project types, and the contextual factors associated with PPS success or failure to demonstrate improvement in the metrics associated with each domain. Table 15. provides the research questions and hypotheses that the Comparative Analysis team will be examining.

Table 15. Comparative analysis research questions and hypotheses

Research Question	Hypotheses
1. Where does variation exist in the strategies implemented by PPS when a similar strategy(s) were selected?	 PPS that implement projects in a specific area of a domain (e.g., asthma, Domain 2) will experience comparatively better performance on related outcomes than PPS that did not implement projects in this area of a domain. PPS that implement projects in a specific area of a domain (e.g., asthma, Domain 2) will experience comparatively better performance following the intervention.
2. How does the relative effectiveness of particular projects intended to produce the same outcome differ among the PPS?	 PPS that select certain projects for a specific domain (e.g., asthma, Domain 2) will experience comparatively better performance on related outcomes than those PPS that selected other projects.
3. What similarities exist among those PPS receiving (or not receiving) maximum payment based on project valuation?	 PPS that achieve a higher percentage of their maximum payment based on project valuation will have higher overall performance on similar outcomes.
4. What regional differences exist between PPS's operating in different regions of New York?	 PPS in the NYC boroughs will have made greater improvements during the demonstration period among similar outcomes than other regions of New York State.
4a. What successes and challenges are associated with local resources or procedures?	
5. What patient-level differences exist in terms of service experience and	Older adults will have comparatively lower scores in service experience and satisfaction than younger adults on similar DSRIP-related outcomes.
satisfaction?	Female patients will report higher levels of satisfaction than males on similar DSRIP-related outcomes.

DATA

To answer the research questions above, the Comparative Analysis team has identified the following quantitative datasets that will be used for analysis:

- 1. Medicaid and Medicare Claims (MDW). These data contain many of the variables and metrics referenced above and will be the primary sources of data.
- 2. Statewide Planning and Research Cooperative System (SPARCS). The data related to a number of outcome measures of interest are stored in the SPARCS database. Use of these data will allow the Independent Evaluator to investigate and compare key metrics across PPS.
- 3. Minimum Data Set (long-term care) (MDS). For measures specific to long-term care (e.g., Domain 3, Behavioral Health, percent of long stay residents who have depressive symptoms), Minimum Data Set data may be used.
- **4. CAHPS**©. The use of CAHPS© data will allow the Independent Evaluator to learn about variations in service experience and patient satisfaction.

OUTCOMES OF INTEREST

To ground the comparison of PPS, the Independent Evaluator has identified a number of measures that have broad-ranging implications for the overall success of the DSRIP program. These measures were chosen based on their potential relevance to the overall DSRIP program goal (e.g., reducing avoidable hospital use by 25% over five years) and the four most frequent diseases of DSRIP project selections as well as their overall disease burden in New York State (behavioral health, cardiovascular diseases, diabetes, and asthma). The Independent Evaluator will use these metrics as the basis for the comparative analysis of PPS. Metrics can be added based on priorities of the New York State Department of Health and project resources.

Table 16. Variables by domain, measure steward and data source for comparative analysis

Domain/ Category	Measure Name	Measure* Steward	Data Source*	National Benchmark Available
Domain 2, A	Potentially avoidable ER visits	3M		MACPAC Report (preferably with Medicaid)
Domain 2, A	Potentially avoidable readmissions	3M		No
Domain 2, A	PQI suite – composite of all measures	AHRQ		No
Domain 2, A	PDI suite – composite of all measures	AHRQ		No
Domain 2, A	CAHPS measures (various)	AHRQ		Only with other state reports. There is no national CAHPS for Medicaid only
Domain 2, B	CAHPS measures (care coordination with provider)	AHRQ		Only with other state reports.
Domain 3, A (BH)	All claims and MDS-based metrics (see DSRIP Strategies Menu and Metrics)	3M, NCQA, CMS	Medical Record, MDS	No
Domain 3, B (CVD)	All claims metrics listed in DSRIP Strategies Menu and Metrics	AHRQ, NCQA, CAHPS	Claims, Survey, Medical Record	No
Domain 3, C (Diabetes)	All claims metrics listed in DSRIP Strategies Menu and Metrics	AHRQ, NCQA, CAHPS	Claims, Medical Record, Survey	No
Domain 3, D (Asthma)	All claims metrics listed in DSRIP Strategies Menu and Metrics	AHRQ, NCQA	Claims	No

CLUSTERING TO CREATE PPS COMPARISON GROUPS

The Independent Evaluator will use clustering to compare those PPS that have implemented projects within a specific domain with those PPS that did not select similar projects in the same domain. For example, this will allow the Independent Evaluator to understand, the impacts of PPS that elected projects addressing asthma care to those that did not. Next, the Independent Evaluator will cluster PPS based on their Domain 2 and Domain 3 selections. For example, several PPS selected 2.b.iv. (Care Transitions to reduce 30-day readmissions) and 3.b.i (Evidence-based strategies for disease management in high-risk/affected populations), whereas others selected only one of the above or neither. The Independent Evaluator will cluster these groups of PPS to create comparison groups and examine specific metrics, such as readmission rates. This approach will identify the potentially most impactful Domain 2 and 3 projects.

Tests of statistical significance will be used to determine whether differences exist between PPS. For measures available at the aggregate level for each PPS, the Independent Evaluator can only examine the bivariate association between the presence of a specific domain or project (or the level of implementation for that project) and the outcome variable. Significance will be measured at the 0.05 level. In that case, the Independent Evaluator will employ chi-square analysis. However, where outcome variables are available at the individual level (e.g., from Medicaid claims), the Independent Evaluator will control for patient characteristics via multivariable, multi-level modeling in which individuals are nested in PPS.

Following completion of significance testing, in order to provide further context for the quantitative findings, the Independent Evaluator will use key informant interview and survey data previously gathered by the Independent Evaluator to contextualize "how" certain PPS have implemented project-specific plans and better understand "why" certain strategies may have been more or less effective in the context of the Comparative Analysis. The Independent Evaluator will be able to identify particular types of implementation strategies that were associated with different outcomes from integrating the qualitative and quantitative data in this manner.

DIFFERENCE-IN-DIFFERENCES

The Independent Evaluator will use a Differences-in-Differences (DID) estimation method to examine specific performance measures in the time before and after the implementation of the DSRIP program comparing PPS involved in specific interventions to those that were not engaged in those interventions. This estimation strategy adjusts for time-based variations in outcomes, helping to discern program impacts from other phenomena. Moreover, this approach will give the

^{*}Note: all information in the above table, except for the national benchmark information, is taken directly from the DSRIP Strategies Menu and Metrics.

Independent Evaluator an aggregate understanding of whether the overall picture has changed for specific domains based on key measures of interest defined in the New York State DSRIP Strategies Menu and Metrics.

This approach also will require the use of risk-adjusted measures. This will be important because it will level the playing field in terms of dual-eligible and SSI patients who tend to seek care at distinct locations and are typically-high utilizers of care. Also, prior to carrying out this analysis, the Independent Evaluator will, if possible, seek to identify patients and providers (hospitals and medical groups) who were not involved in any DSRIP PPS in order to understand the trends in use, quality, and spending over time in a separate difference-in-differences analysis.

PATIENT-LEVEL COMPARISONS

The Independent Evaluator will examine trends within and across PPS with respect to patient-level outcomes. In particular, the Independent Evaluator will focus such comparisons on factors including age, sex, race, presence of chronic conditions, and mental health/substance use to inform their understanding of patients' service experience and satisfaction during the DSRIP program. Such analyses will require the use of CAHPS data to examine patient satisfaction scores. However, because CAHPS scores/responses are typically not attributed to specific patients and are only available at the department, hospital, medical group, physician, or health plan level, the Independent Evaluator will need to examine the organizational-level CAHPS scores and their relationship to patient-level outcomes for populations attributed to the specific organization (at multiple levels). To effectively conduct such an analysis, the Independent Evaluator will build upon the approach set forth by Sequist et al. (2008) to address the lack of individual-level outcome data linked to CAHPS scores.

Because the Medicaid population can be vulnerable to income status changes and other reasons for disenrollment, the Independent Evaluator will determine inclusion criteria based upon months enrolled over each 12-month time period for specific measures (e.g., HEDIS-based quality measures often require 11 months of enrollment) and gaps in coverage. When considering other measures (e.g., spending and patient experience), all Medicaid members will be included for the months they were enrolled over the five-year program and the 12-month look-back period for pre-DSRIP data.

CONTEXTUALIZATION OF QUANTITATIVE FINDINGS USING IMPLEMENTATION AND PROCESS DATA

As previously stated, quantitative data will be obtained from publicly releasable administrative datasets. Qualitative data collected as part of the independent evaluation will then be used to extend and contextualize the quantitative findings. Qualitative data sources used in this phase of the analysis will include focus groups, semi-structured key informant interviews with PPS administrators and staff, and surveys of providers with semi-structured interview follow-up. The Qualitative Comparative Analysis (QCA) method will be applied for analysis. This method allows for qualitative interpretation based on identifying the most logical explanation of phenomena (in this case, the quantitative findings) (Ragin, 2014).

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