2016

South Jersey Behavioral Health Innovation Collaborative

YEAR ONE FINAL REPORT

SOUTH JERSEY
BEHAVIORAL HEALTH
INNOVATION COLLABORATIVE

CONTENTS

1 EXECUTIVE SUMMARY

1.1 INTRODUCTION

Every day, people such as "Jane," a 40-year-old woman with multiple chronic conditions including mental illness and substance use disorder diagnoses, seek treatment at New Jersey's hospitals. In a five-year span (2010-2014), Jane has lived at four different addresses in South Jersey and has visited hospitals in five different healthcare systems a total of 77 times. Her hospital stays have totaled 294 days at a cost of $4.4 million, with the hospitals receiving $386,000 in payment. Jane is a real-life example of a patient struggling to navigate an outdated system in which services and needs are mismatched.

Case study: Jane*

- About 40 years old, female
- Insured by Medicare parts A and B
- Dual substance use disorder and mental health issues: alcohol, anxiety, severe depression, and drug use
- Has 15 chronic conditions
- Lived at four different addresses from 2010 to 2014
- 77 hospital visits, spanning all five hospitals, in 5 years: 58 emergency department, 19 inpatient
- Accumulated 294 days in the hospital and $4.4 million in charges during those 5 years
- Hospitals reimbursed $386,000 for her care

*Jane is a real person whose name has been changed and data anonymized to prevent identification.

Jane's story—similar to those of hundreds of other patients—highlights results of complex, high-need patients navigating a system of services ill-equipped to meet their physical, behavioral and social service needs.

Improving access to treatment for mental illness and substance use disorders was officially identified as a health priority for southern New Jersey in 2013 through the Tri-County Health Needs Assessment. In response, five health systems in southern New Jersey—Cooper University Health Care, Kennedy Health, Lourdes Health System, Inspira Health Network, and Virtua—joined together to form the South Jersey Behavioral Health Innovation Collaborative (SJBHIC) in 2014.

The SJBHIC aims to improve the quality, accessibility, capacity, and coordination of behavioral health services for residents in southern New Jersey. To gain an initial understanding of the scope of challenges and opportunities within the current behavioral health system, the SJBHIC completed an assessment drawing on a variety of data sources, including analysis of five years of member hospital claims data and more than 50 interviews with key stakeholders throughout the state. This qualitative and quantitative analysis illuminates the degree to which the behavioral health system is not fully meeting the needs of patients.

1.2 PATIENTS' NEEDS UNMET: A DATA-DRIVEN OVERVIEW

Reports show that nearly 15% of adults in New Jersey have been diagnosed with a mental illness, and about 260,000 adults live with a severe mental illness. These patients face challenges in accessing the care they need,

leaving many patients to turn to insufficient solutions for obtaining care, including visiting an emergency department (ED) in lieu of a consistent outpatient provider.[1]

In New Jersey, the number of ED visits and inpatient admissions for which mental health or addiction was the primary or secondary diagnosis increased by almost 30% from 2010 to 2014.[2] Jane's situation highlights this problem; far from unique, she is one of more than 800 patients who visited all five SJBHIC health systems over the five-year period. Of these patients, the overwhelming majority had at least one behavioral health diagnosis, and almost half had both mental illness and substance use disorder diagnoses. Together, these patients had more than 31,000 hospital visits over the five-year span, with more than $260 million in charges to hospitals. For patients with visits to five hospitals in 2010, the median charge was $53,633; for patients visiting five hospitals in 2014, the median charge increased to $123,518.

1.3 Disjointed Service Delivery

The current behavioral health system was described by stakeholders as "well-intentioned," "with a tremendous amount of services," but "siloed" and "disjointed," without enough access to appropriate services, leaving patients "unserved."

Jane has been diagnosed with diabetes, chronic heart failure, and kidney disease in addition to her struggles with substance use and mental health issues. Coordinating care across the various providers treating her for her different health concerns would be particularly difficult under the current behavioral health system due to its divided nature. Separation of mental health, addiction services, housing, and primary care renders coordinated care challenging.

The divisions between healthcare, social services, and behavioral health services mean that, in the words of one stakeholder: "There is a lack of integrated care, there's a lack of one system We have multiple systems." Another stakeholder noted that these multiple systems result in "not really treating the whole person," but rather "silos based on the payment systems [and] licensure." Outdated models for how care is delivered, managed, paid for, and regulated within each of these sectors are also strong barriers to getting patients the care and services they need in the appropriate setting.

Equally impactful are outdated frameworks and incentives for how we think about and deliver behavioral health care. These lead to stigmatization of the patient, inadequate provider training, payment models that do not incentivize care delivery in the right settings, and regulatory frameworks that divide a patient's caregivers rather than encouraging collaboration. At each of these levels, incentives must be altered so that complex patients, such as Jane, are at the forefront of decision making and care delivery. Table 1 illustrates how the people who influence and deliver behavioral health services perceive these outdated frameworks.

[1] National Alliance on Mental Illness. (2010). *NAMI State Advocacy 2010 State Statistics: New Jersey*. Retrieved from http://www2.nami.org/ContentManagement/ContentDisplay.cfm?ContentFileID=93509

[2] Mental health and addictions volume report. (2015). New Jersey Hospital Association. Retrieved from http://www.njha.com/media/332042/Mental-Health-Addiction-Report15.pdf

Table 1. Stakeholder Perceptions of Behavioral Health Care Frameworks

Framework	Illustrative Quote
Care delivery	*It would be wonderful if we could ensure quality standards across our system of care, ensure that people are using evidence-based practices. That's not happening at this point.*
Provider training	*I love the concept of … having primary care physicians and internal medicine have more training in behavioral health. And, I mean, really do screenings at annual physicals. And if people are experiencing hypertension or depression, be able to … encourage them to seek help.*
Payment models	*People say that there are not resources in New Jersey. I don't believe that's true. I believe there are resources in New Jersey. The resources that are used are not well applied to the situation.*
Regulatory apparatus	*[There are] different divisions of state government managing these things. And all those [divisions] are barriers to effective integration.* *A redesign of the financing, the regulatory, the legislative framework needs to be put into place in order to enable integrated care. … Until all of that is done, people [are] having to ... make extraordinary efforts to try to bring physical and behavioral health together.*

1.4 Shifting Toward a Person-Centered Health Care System

Despite these significant challenges, New Jersey is currently at a pivotal moment for overcoming these systemic barriers. There is a recognized need to redesign the system so it is person-centered, addresses social challenges, integrates care across all providers, and is supported through coordinated governance and financing.

However, there is a gulf between the siloed, disjointed system that currently exists and the person-centered system that is needed. Bridging this divide will require a significant shift in the principles that underlie how mental health services, addiction services, primary care, and housing care are delivered.

Fortunately, there are bright spots of innovation and evidence-based care delivery being implemented across the state and country. These providers embrace the shifts in principles and may hold the key to achieving the behavioral health system envisioned. Table 2 highlights some of the shifts in principles starting to be employed that need to be adopted on a wide scale to transform the entire system.

Table 2. Contrasting Approaches to Patient Care

	Problem-Centered Approach: Disjointed	Person-Centered Approach: Aligned
Mental Health	ï Disability lens, medication focused ï Hierarchical ï Authoritarian ï Institutional ï Not comfortable with co-occurring substance use disorder	ï Wellness and recovery focused ï Consumer and peer driven ï Trauma informed ï Community based ï Comfortable with co-occurring substance use disorder
Substance Use Disorder	ï Moral failing ï Under-trained staff ï 12-step focused ï Inpatient detoxification and rehab focused	ï Treatable chronic medical condition ï Addiction specialty, harm reduction ï Evidence based, trauma informed ï Outpatient detoxification and treatment
Primary Care	ï 15-minute, volume-based visits ï Panel size too large ï Medicalizing social, behavioral problems ï Mental health, addiction carved out from scope	ï Ambulatory ICU ï Panel management ï Integrated with mental health and substance use disorder treatment ï Health homes
Housing	ï Shelter model ï Sobriety-based, rule-focused culture ï Separate from other services	ï Housing First/supportive housing ï Harm reduction ï Integrated with mental health, addiction services, education, and job training

1.5 SJBHIC TAKING ACTION

The hospital systems that constitute the SJBHIC are invested in ensuring a shift toward patient-centered care. They are already implementing the following interventions aimed at providing an integrated, coordinated, and efficient behavioral health system:

- ***Regional Behavioral Health Complex Case Conferencing*:** Joint case conferencing for patients who regularly visit multiple hospitals in the region; selected patients will receive a care plan shared by each participating hospital.
- ***Shared Protocols and Education*:** Shared learning to develop and implement evidence-based practice protocols for care across the region.
- ***Integration of Psychiatric Specialists into EDs*:** Integration of new clinical staff with psychiatric specializations into EDs to implement new care models and serve as champions for change.
- ***Shared Measurement System*:** Collection and review of regional core quality measures to assess collective progress, such as length of hospital stay.
- ***Housing First Pilot:*** Recovery-oriented approach whereby housing-instable individuals are first provided with permanent housing and then offered additional services as needed.
- ***Legislation:*** Support for legislation aimed at innovative, evidence-based models for care delivery.
- ***Regional Psychiatric Emergency Services:*** Exploring implementation of psychiatric emergency services centers based on a national model being employed regionally throughout the country.

These pilot programs aim to treat complex patients such as Jane from a person-centered approach and provide coordinated care. This improved behavioral health system will be better able to anticipate patients' needs and prevent costly hospitalizations.

The South Jersey Behavioral Health Innovation Collaborative was founded in 2014 to address the growing need for integrated mental illness and substance use disorder healt care. Founded by the CEOs of five hospital systems—Cooper University Health Care, Inspira Health Network, Kennedy Health, Lourdes Health System, and Virtua—the collaborative is partnering with the New Jersey Hospital Association and the Camden Coalition of Healthcare Providers to improve quality, access, coordination, and follow-up among patients in need of mental illness and addiction treatment.

2 INTRODUCTION

In 2013, the Tri-County Health Assessment Collaborative, consisting of hospitals, health systems, and health departments in Burlington, Camden, and Gloucester counties, released a comprehensive community health needs assessment (CHNA)[3] that identified mental health and substance use disorder[4] as one of five key health issues facing the region. In 2014, in response to these findings, five hospital systems in the southern New Jersey region—Cooper University Health Care, Kennedy Health, Lourdes Health System, Inspira Health Network, and Virtua—formed the South Jersey Behavioral Health Innovation Collaborative (SJBHIC).

The SJBHIC aims to improve the quality, accessibility, capacity, and coordination of behavioral health services for residents in southern New Jersey. Recognizing the importance of first understanding the current state of the behavioral healthcare delivery system in southern New Jersey, the SJBHIC commissioned the New Jersey Hospital Association and the Camden Coalition of Healthcare Providers to complete a mixed-methods assessment to identify opportunities and challenges from which to draw conclusions and recommend interventions and policy change. This report summarizes the results of that assessment and conclusions from the findings.

The report is divided into three sections. The first section describes the assessment methods and limitations. The second section describes the results of the assessment in three parts: identification of a disjointed behavioral health service delivery system leaving patients unserved, elucidation of the outdated frameworks underlying the mismatch between the care needed and the services delivered, and recommendations for systemic shifts toward person-centered care delivery. The final section highlights current and future efforts by the SJBHIC to help ensure a shift to person-centered care.

3 METHODS AND LIMITATIONS

The researchers employed a mix of qualitative and quantitative methods drawing on a range of primary and secondary data sources to achieve a holistic depiction of the current state of New Jersey's behavioral health

[3] Lourdes Health System. (2013). *Community health needs assessment final summary report: Camden, Burlington & Gloucester Counties*. Retrieved from https://www.lourdesnet.org/wp-content/uploads/2013/11/CHNA-Tri-County-Final-Report_Our-Lady-of-Lourdes.pdf

[4] The terms *mental health* and *substance use disorder* are preferred in lieu of *behavioral health*, signifying a transition toward acceptance of these conditions as brain diseases. Wherever possible the new terminology is used in this report; however, exact wording used by informants is preserved within key informant quotations.

system. Data sources included primary collection and analysis of key informant interview data, claims data from the five member hospitals, and secondary data sources described below.

3.1 Key Informant Interview Data

From May 2015 to October 2015, researchers completed 52 semi-structured phone and in-person interviews with a variety of key informant stakeholders. Requests for interviews were made using a purposeful sampling methodology to develop a sample of interviews that represented a wide range of stakeholders involved in the behavioral health system in southern New Jersey (Table 3). In interviews, researchers also employed a process of snowball sampling by asking interviewees to identify individuals or organizations who could provide additional perspectives. The researchers hoped to include a ninth stakeholder group, payers, but were unsuccessful in scheduling interviews with key informants from this group.

Table 3. Categories of Stakeholders Interviewed

Stakeholder Category	Number of Interviews
Hospital	16
Community-based Provider	12
Government	6
Association	6
Academic	4
Advocacy Group	3
Subject Matter Expert	3
Family Caregiver	2
Total	**52**

To guide the interviews, researchers developed a semi-structured interview guide based on a literature review and input from the SJBHIC steering committee. Topics included the current state of behavioral healthcare in New Jersey, positive change in the system, barriers and challenges, collaboration across stakeholders, and the future of behavioral healthcare delivery. Interviews were recorded, and the recordings were transcribed and de-identified. Transcripts were then imported into the qualitative analysis software NVivo 10 to be coded and analyzed to identify themes. Concepts represented in the codebook were determined a priori based on priority evaluation questions selected by the SJBHIC steering committee and refined utilizing a general inductive approach to identify themes, patterns, and categories that emerged organically from the raw data. Thematic saturation occurred after reviewing and discussing 30% of the interviews, at which point the codebook was finalized and researchers independently coded the transcripts, holding meetings to resolve discrepancies and identify the overarching themes presented in this report.

3.2 SJBHIC Hospital Claims Data

From June 2015 to September 2015, researchers collected 5 years (2010-2014) of payer billing records from the five SJBHIC partner health systems. The data—comprising 24.86 million visit, diagnosis, payer, and demographic records—were cleaned to remove duplicates and invalid values and to harmonize formatting and codes within and among hospitals. Cleaning was done in a parsimonious manner to ensure retention of as much of the original data as possible.

Once cleaned, visit records were linked to uniquely identify patients regardless of the facilities that provided their treatment. Record linkage was performed in multiple passes using combinations of dates of birth, Social Security numbers, genders, medical record numbers, and phonetic transformation of patients' names. Linkage is necessary not only because some records have incomplete information and different hospital systems do not use consistent patient identification numbers, but also because significant variation can occur within a single system.

After cleaning and linking across records, the researches had a data set of 1.08 million patients with 3.67 million visits. This data set was analyzed to determine the prevalence of patients with substance use disorder and mental health diagnoses, as well as the size, cost, and characteristics of the patient population shared by the five hospitals. Findings are presented in this report.

3.3 Secondary Data Sources

The researchers used New Jersey state budget data, service-level data, and publicly available documents to provide additional context to the interview and claims analysis. State-level financial data were extracted from publicly available budget documents, and service-level data (e.g., screening center utilization and state psychiatric hospital admissions) were received through an open records access request. Finally, document review drew upon a wide range of publicly available sources including reports, news articles, presentations, and published literature.

3.4 Limitations

The researchers acknowledge that the hospital perspective is overrepresented in this study, which limits the ability to provide an overall assessment of the current state of the behavioral healthcare delivery system in southern New Jersey. The interviewees sampled are mostly hospital-based informants, and the base of the quantitative analysis is claims data from the five partner hospitals. This is because the assessment originated from a hospital-based collaborative, and issues facing hospitals were of great interest to the steering committee. Additionally, hospital informants and claims data were more easily accessible due to the researchers' relationship with the steering committee, which was composed of hospital representatives.

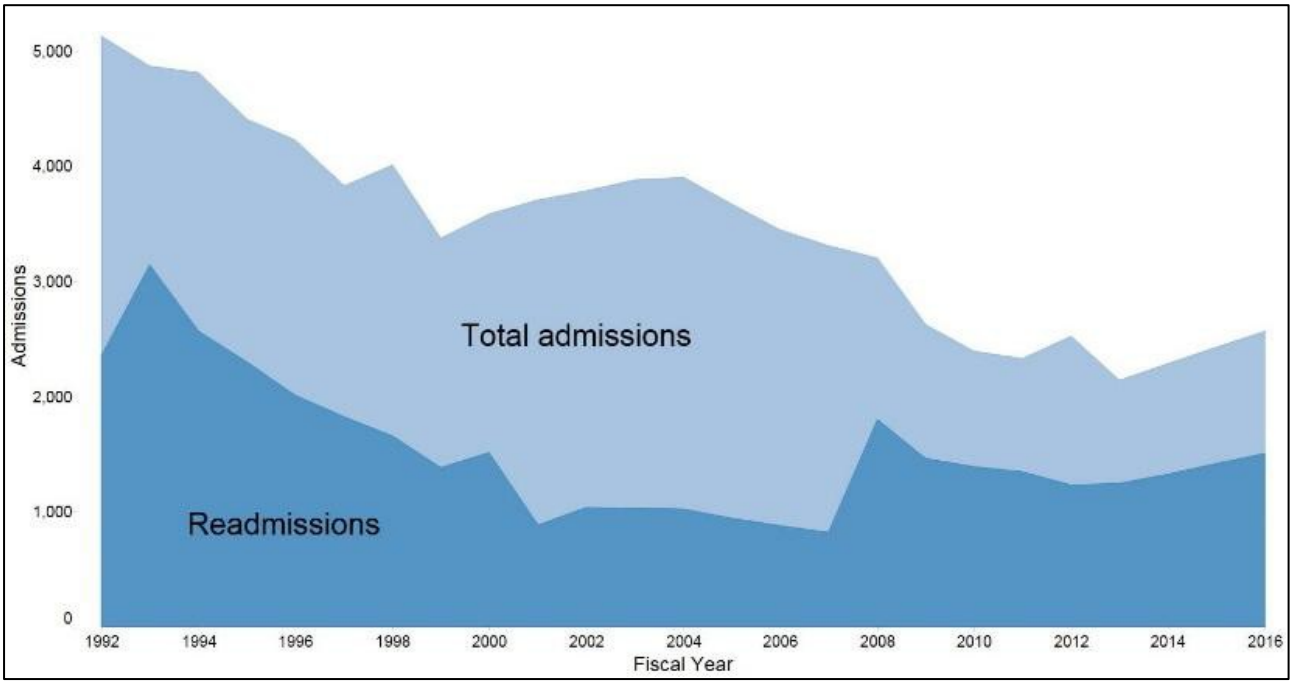
4 Findings

The assessment reveals a well-intentioned but siloed and disjointed behavioral system failing to provide patients with sufficient access to appropriate services, ultimately leaving patients unserved. Underscoring this characterization is a divided behavioral health system: separating mental health, addiction services, housing, and primary care. Outdated frameworks and incentives for behavioral health care—from point-of-care delivery to training, payment models, and regulatory structures—drive this mismatch between the care needed versus delivered. Despite these significant challenges, New Jersey is currently at a pivotal moment for overcoming these

systemic barriers. Stakeholders are aligned in recognizing the need to redesign the state's behavioral health system so that it is person-centered, addresses social determinants, integrates care across the continuum, and is supported through coordinated governance and financing. Learning from these findings, hospitals in the SJBHIC have begun to implement interventions to move toward this future vision.

4.1 Regional and Historical Context

In New Jersey, there is an increasing need for mental health and substance use disorder services that outstrips current capacity. Nearly 15% of adults in the state have a mental illness,[5] and about 3% (260,000 adults) have a severe mental illness.[6] Moreover, the behavioral health system that these patients must navigate is at a unique juncture. Beginning with the passage of the Community Mental Health Act (1963) and more recently reiterated by the U.S. Supreme Court ruling in *Olmstead v. L.C.* (1999), federal and state policy has formally supported the deinstitutionalization of patients with disabilities or in need of behavioral health services. National estimates in 2010 averaged approximately 17.1 public psychiatric beds per 100,000-population, a 90% decrease since 1955.[7] Though this average is slightly higher in New Jersey, there is heavy emphasis on upholding the *Olmstead* decision and prioritizing community integration whenever possible for patients. Figure 1 depicts the decline in state psychiatric hospital admissions, exemplifying this trend toward deinstitutionalization.



[5] Governor's Council on Alcoholism and Drug Abuse. (2014). *Confronting New Jersey's new drug problem: a strategic action plan to address a burgeoning heroin/opiate epidemic among adolescents and young adults*. Retrieved from http://gcada.nj.gov/policy/master/documents/2014_TaskForce_Report.pdf

[6] National Alliance on Mental Illness. (2010). *NAMI State Advocacy 2010 State Statistics: New Jersey*. Retrieved from http://www2.nami.org/ContentManagement/ContentDisplay.cfm?ContentFileID=93509

[7] Torrey, E.F., Fuller, D.A., Geller, J., Jacobs, C., & Ragosta, K. (2012). *No room at the inn: Trends and consequences of closing public psychiatric hospitals, 2005-2010*. Arlington, VA: Treatment Advocacy Center.

Figure 1. New Jersey psychiatric hospital admissions and readmissions. (Source: New Jersey Open Public Records Access Data. 1992-2016)

However, informants overwhelmingly agreed that the deinstitutionalization of the behavioral health population has not led to sufficient resources in the community. Community-based organizations in New Jersey currently find themselves unable to meet the needs of patients with behavioral health disorders, especially those with complex and chronic conditions. As patients face challenges in accessing the care they need, many are turning to the ED to obtain care.[8] In New Jersey, the number of ED visits for which mental health or substance use disorder was the primary or secondary diagnosis increased by almost 30% between 2010 and 2014.[9] Additionally, patients with a primary or secondary diagnosis of mental health or substance use disorder account for over one third of all inpatient admissions.[10] Compounding this, the number of inpatient and outpatient admissions for heroin or opiate addiction rose by more than 30% between 2008 and 2013, in large part driven by the heroin and opioid addiction crisis.[11] Furthermore, for the 10-year span between 2002 and 2012, there was nearly a 700% increase in admissions to state-licensed or -certified substance use disorder treatment programs due to prescription drug abuse, with 8,300 admissions to these facilities in 2012 alone.[12]

4.2 Stakeholder Perceptions of the Current Behavioral Health System

When asked about the current state of the behavioral health system in New Jersey, stakeholders described a system that is "well-intentioned" "with a tremendous amount of services out there," but that services are "not applied well," "not to scale," and "disjointed." Stakeholders highlighted pockets of "creative programs" and innovation happening around the state (described further in this report) but said that that these programs are not yet at scale to meet the need, noting that "there's been a move to integrate behavioral healthcare with physical healthcare in some isolated settings."

A common theme among stakeholders, however, was that the current system leaves consumers "unserved" and unable to access "the right services at the right time." This was described as a lack of access to appropriate services including community-based mental health and substance abuse services, providers, wrap-around services, and intermediate care. Other stakeholders noted that there are creative services available but not at a scale to meet the need. Finally, stakeholders described the services that are available as "disjointed," "fragmented," and "uncoordinated." This results in patients presenting in the "wrong place," being "provided incorrect services," experiencing difficulty moving "smoothly between care providers and levels of care within the state," and being left without the "continuum of care" deemed necessary for a person-centered system to thrive in the state. Table 4 provides stakeholder descriptions of how the current behavioral system leaves patients unserved.

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[8] DeLia, D. (2007). Hospital capacity, patient flow, and emergency department use in New Jersey. New Brunswick, NJ: Rutgers Center for State Health Policy. Retrieved from http://www.nj.gov/health/rhc/documents/ed_report.pdf

[9] Mental health and addictions volume report. (2014). New Jersey Hospital Association. Retrieved from http://www.njha.com/media/332042/Mental-Health-Addiction-Report15.pdf

[10] New Jersey Hospital Association. (2015). Mental health and addiction volume report: A compilation of uniform billing information trending: 2010-2014. Retrieved from http://www.njha.com/media/332042/Mental-Health-Addiction-Report15.pdf

[11] O'Dea, C. (2014). Rise in drug treatment admissions in NJ reveals progress of a plague. *NJ Spotlight*. Retrieved from http://www.njspotlight.com/stories/14/10/02/heroin-and-opiates/#

[12] Governor's Council on Alcoholism and Drug Abuse. (2014). *Confronting New Jersey's new drug problem: A strategic action plan to address a burgeoning heroin/opiate epidemic among adolescents and young adults*. Retrieved from http://gcada.nj.gov/policy/master/documents/2014_TaskForce_Report.pdf

Table 4. Challenges in the Current Behavioral Health System

Challenge	Stakeholder Descriptions
Services available but not at scale to demand	ï I think that the continuum of services that the state has in place are pretty darn good. It's just that they're not adequately funded to meet the demands placed on them. ï People say that there are not resources in New Jersey. I don't believe that's true. I believe there are resources in New Jersey. The resources that are used are not well applied to the situation. ï Resources are not sufficient to address the need, obviously…. The delivery system is not the best steward of the resources that are available. ï I just think that we lack capacity. So the agencies … provide very good services…. The problem is that we have wait lists all over the place.
Lack of access to appropriate services	ï I think on the substance abuse side of it, it's fairly clear that we don't have an adequate number of the detox facilities. ï People are in our higher-end services who don't need to be there any longer, and then we have people who can't access our most basic service such as outpatient. ï What I think is missing is a level of intermediate care. And I don't mean by that that it should be in a hospital, but it needs to be a greater … availability of structured programs and activities to support people in community living. ï Lack of safe and affordable housing—and I think that that's the case throughout New Jersey.
Disjointed and uncoordinated services	ï My description of the delivery service right now is that it is well-intentioned but fragmented…. [Behavioral health service providers] communicate with one another but don't collaborate very well. In addition to that, the primary healthcare delivery system is separate from the behavioral healthcare delivery system, and yet … our mind and body are not separate. So I would say there is disconnect. There are providers for behavioral healthcare, primary care, but they … generally do not work together. And patients do not have the benefit of real easy access to services because of that. ï [Community] programs [exist] to meet these little pockets of need without looking at the impact in the overall system.
Lack of continuum needed for person-centered care	ï [The state lacks programs] tailored to meet the individual needs of a person [and instead has] programs that we think are going to plug this hole or address this problem at this point in time. ï And I would think the overall impression is that there's generally inadequate services … at pretty much every level…. I guess I'm concerned that people in need of services are not able to access the services that they need, when they need it. But it's not always clear what the reason for that may be…. I know a lot of people end up in places by default because there's no place else to put them.

4.2.1 Case Study: Jane

As illustrated above, stakeholders described a well-intentioned but disjointed behavioral health system that leaves consumers and families unable to access "the right services at the right time." The following case study, derived from analyses of 5 years of claims data (2010-2014) from the five SJBHIC partner health systems, highlights the impact of the current system on complex, high-needs patients navigating a system of services ill-equipped to meet their physical, behavioral, and social service needs.

Case Study: Jane[13]

- About 40 years old, female
- Insured by Medicare parts A and B
- Dual substance use disorder and mental health issues: alcohol, anxiety, severe depression, and drug use
- Has 15 chronic conditions (See Figure 3 below)
- Lived at four different addresses from 2010 to 2014
- 77 hospital visits, spanning all five hospitals, in 5 years: 58 ED, 19 inpatient
- Accumulated 294 days in the hospital and $4.4 million in charges during those 5 years
- Hospitals reimbursed $386,000 for her care

Jane is a 40-year-old woman with multiple chronic conditions including mental illness and substance use disorder diagnoses. In a 5-year span (2010-2014), Jane has lived at four different addresses in southern New Jersey and has visited hospitals in five different healthcare systems a total of 77 times, including 58 ED visits and 19 inpatient admissions. Often mental illness or substance use disorder was the driving diagnosis for admission (Figure 2). Mental illness and substance use disorder, however, are not the only diagnoses driving Jane to the hospital; she has a multitude of comorbid chronic diagnoses (Figure 3). In total, Jane spent 294 days in the hospital at a cost of $4.4 million, with the hospitals receiving $386,000 in payment.

[13] Jane is a real person whose name has been changed and data anonymized to prevent identification.

Figure 2. Multi-health system utilization diagram depicting Jane's 77 visits to five health systems over 5 years, often with mental health and/or substance use driving diagnosis.

Orange = Mental health and substance use disorder diagnoses
Purple = Chronic diagnoses
Bold = Severe diagnoses

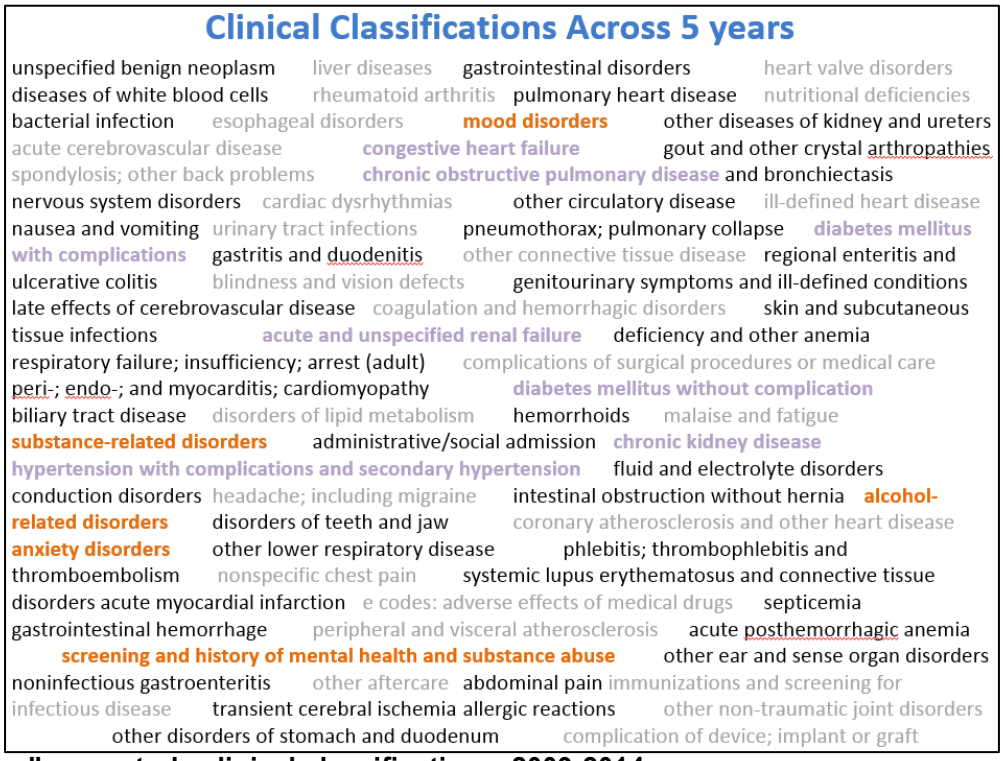

Figure 3. "Jane" case study clinical classifications, 2009-2014.

4.3 Impact On High-Need Populations

Jane is a real-life example of just one patient struggling to navigate an outdated system in which services and needs are mismatched. Stakeholders described a subset of high-need populations who are left particularly underserved by the current system. This is due to a lack of services required for these individuals to function at the highest level possible in the community, and the lack of a single coordinating entity to manage patients' chronic health conditions and social service needs. These high-need populations were described by stakeholders as individuals who are severely and chronically mentally ill, have co-occurring mental illness and substance use disorder, have co-occurring medical conditions, have a developmental or intellectual disability (including those with co-occurring mental illness), or are involved in the criminal justice system.

This amplified impact is highlighted in the analyses of claims data from 2010 to 2014 from the five partner hospitals of the SJBHIC. The data show that nearly 800 patients visited all five health systems within a 5-year period (2010-2014), with significantly more patients visiting three to four of the five hospitals. Of these patients who visited all five hospitals, the overwhelming majority (82%) had at least one mental health or substance use disorder diagnosis, and almost half of the individuals had both a mental illness and substance use disorder

diagnosis. Figure 4 depicts the frequency of these diagnoses related to the number of SJBHIC health systems visited.

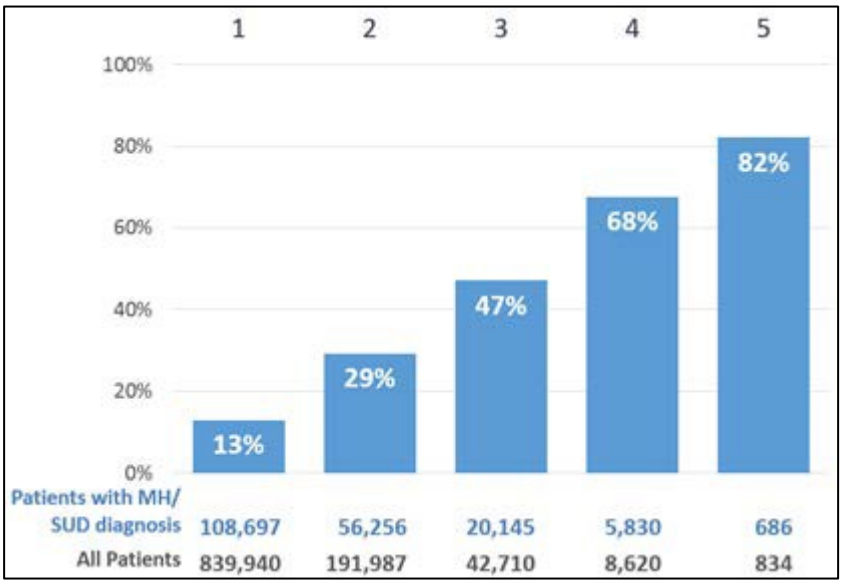

Figure 4. Frequency of mental health and substance use disorder diagnoses among patients accessing multiple SJBHIC health systems. (Source: SJBHIC hospital claims data, 2010-2014)

Analysis of the claims data illustrates an outlier group of 686 complex, high-need patients with a mental health or substance use disorder diagnosis whose needs are not being met by the current behavioral health system and who are turning to hospitals to obtain care. These patients had a hospital visit at all five partner hospitals of the SJBHIC in a 5-year period. Cumulatively these patients had almost 30,000 hospital visits (27,288 ED visits and 2,358 inpatient visits), with a total length of stay of 22,815 days in the hospital, more than $260 million in charges, and a collection of $31 million in receipts. For patients with visits to five hospitals in 2010, their median charges were $53,633; for patients visiting five hospitals in 2014, median charges increased to $123,518. Even within this subset of outlier patients there are pockets of extreme utilization, with single patients experiencing 434 hospital visits and accumulating over $4 million in charges in the 5-year time period (Table 5 highlights additional characterizations of these patients).

Table 5. Patients with a Mental Health or Substance Use Diagnosis Visiting all Five SJBHIC Hospitals (n = 686)

	Minimum	Average	Maximum
Age (years)	2	**36**	94
Hospital visits	5	**43**	434
ED visits	2	**40**	431
Inpatient stays	0	**3**	61
Days between visits	0	**68**	404
Stay length (days)	0	**4**	64
Days spent in the hospital	0	**33**	402
Charges	$6,928	**$378,732**	$4,432,220
Hospitals' payments received	$0	**$45,849**	$641,620
Municipalities inhabited	1	**7**	18
Chronic conditions	1	**7**	23

(*Source: SJBHIC hospital claims data, 2010-2014)*

4.4 Outdated Behavioral Health Care Frameworks

The data portray complex, high-need patients with a mental health or substance use disorder diagnosis whose needs are not being met by the current behavioral health system. Driving the mismatch between underlying need and service delivery is a system that is becoming obsolete. Divisions between the fields of behavioral health, addiction services, housing, and primary care mean that, in the words of one stakeholder: "There is a lack of integrated care, there's a lack of one system We have multiple systems." Another stakeholder described how these multiple systems result in "not really treating the whole person," but rather "silos based on the payment systems, licensure." Equally impactful are outdated frameworks and incentives for behavioral health—from regulatory frameworks to payment models, provider training, and care delivery. This study found burdensome regulatory frameworks that create silos and limit collaboration, inadequate payment models that contribute to insufficient provider capacity, and care provider training and delivery that lag behind the current evidence base.

4.4.1 Regulatory Requirements

A preponderance of informants discussed government regulations as "hurdles" to achieving desired change within the behavioral health sector. For instance, a majority of informants described integration of physical and mental healthcare as a mechanism to achieve "positive change" that makes "a lot of sense," especially for patient subpopulations with serious mental illness or co-occurring chronic disease. One reasoning described by informants was that patients often "feel comfortable" in behavioral health sites with which they are familiar and may be more likely to attend their appointments. Informants, however, highlighted licensing and "getting paid" for behavioral health services as barriers to the integration of care. Examples of the difficulties in providing care as a result of these regulatory hurdles were common throughout the interviews. As one federally qualified health center noted: "We don't have a community mental healthcare license, so we can only apply the billing codes that fit the ambulatory healthcare setting. We can't apply those that would apply in a behavioral healthcare setting." This precludes the federally qualified health center from receiving reimbursement for services such as psychiatry, even though patients may have insurance that "pays well for those services."

Furthermore, according to one behavioral health advocate, New Jersey lacks co-location of behavioral and physical healthcare because of burdensome regulations. As a result, the behavioral health system is still operating on a referral basis, which leads to a "huge drop-off rate in patients accessing behavioral healthcare outside of their primary care" physician visit.

Informants also discussed challenges presented by the Health Insurance Portability and Accountability Act (HIPAA) and other data sharing regulations as "inhibiting data sharing," "limiting transparency" of patients' medical histories, and preventing providers from "collaborating on patient care." Many informants highlighted the need for regulatory changes in New Jersey to allow for information sharing around personal health information. As one informant stated:

> Overuse of HIPAA is always mentioned as a real problem.… In most cases, [HIPAA is] just seen as a knee-jerk reaction on the part of treating professionals to keep families out of the treatment process But HIPAA actually gives professionals a great deal of leeway in communicating with families about their family member.

4.4.2 Provider Reimbursement

Despite the fact that the number of uninsured individuals in New Jersey has decreased significantly in recent years, informants often made the distinction between coverage and availability of services.[14] A common sentiment expressed by informants was that while Medicaid expansion has increased coverage throughout the state, Medicaid reimbursement rates are still too low for many providers to accept Medicaid payment; therefore, the availability of providers remains insufficient for patients to access care. Informants described New Jersey Medicaid reimbursements as "one of the lowest reimbursement rates in the nation with respect to all healthcare services." They also stated that "plenty [of] states that have better rates than we do," and described how more Medicaid funding is needed in order for Medicaid to fulfill its promise, particularly in the area of...behavioral health services. Payment rates within behavioral health was offered widely among informants as the reason for patients not being able to access the care they require. Informants also stated that the challenge is particularly great with regard to long-term outpatient treatment required by the chronically mentally ill to live "productively" within the community.

In addition to inadequate Medicaid payment rates, informants alluded that the methods for reimbursing providers are outdated. Informants suggested that the system requires a reimbursement model that incentivizes the provider to treat the whole patient, rather than the current volume-based model. In describing such a model, one informant proposed that a community health entity "could take in some kind of a bundled payment and then distribute it to a psychiatrist in a primary care practice, and even connect with therapists." Such a bundled payment option would provide a way to "leverage that skill and expertise and pay [psychiatrists and therapists] quickly, maybe not for seeing every patient, but for helping to consult with others."

4.4.3 Provider Recruitment and Training

A preponderance of informants agreed that the behavioral health workforce does not have the necessary capacity to meet patient needs. This concern was voiced by informants who stated that there are "not enough people who are going into psychiatry as a specialty," there is an "insufficient number" of providers to meet demand, and "in some places people have to wait 6 months to see a psychiatrist." The lack of capacity across behavioral health specialties was voiced by an informant who noted that "the professional capability in all areas—psychiatrists, psychologists, social workers—does not match the resources [or] the need." Another informant emphasized the low number of psychiatrists treating Medicaid patients. This informant warned that due to the high cost of medical school, simply having passion for psychiatry is not sufficient to incentivize enough medical students to choose that specialty; there needs to be sufficient reimbursement to providers in the field. Informants also noted that the outpatient workforce is especially in need of behavioral healthcare providers. They discussed challenges faced by patients such as those who could not see outpatient psychiatrists "right away when they have psychiatric needs" and who had difficulty "accessing care on an outpatient basis … [due to] insurance issues." Importantly, the need for a more robust outpatient workforce was recognized by those working within hospitals, as one hospital informant stated:

> The concern really is the accessibility of outside acute care. Because if you're inside [the hospital], everything works really well. After the acute care, where are we going afterwards is the barrier that we have. If they don't have this certain insurance payer, you can't get in…. New Jersey has … very limited capacity as far as accepting patients.

[14] O'Brien, K. (2015). Since Obamacare, number of NJ's uninsured keeps falling, census says. *NJ Spotlight*. Retrieved from http://www.nj.com/healthfit/index.ssf/2015/09/since_start_of_obamacare_njs_number_of_uninsured_c.html

Beyond capacity, informants noted that the workforce is "insufficiently trained" and "better training is needed" to serve subpopulations of behavioral health patients with unique needs. In particular, informants described how more trainings are needed for both hospitals and community providers on how to care for patients with developmental disabilities, brain injuries, or severe mental illness, and populations in an institutional setting. Repeated refrains from informants were that the training should focus on "skills building," including "de-escalation" and providing "feedback and guidance" to patients.

4.4.4 Care Delivery

Informants discussed a range of challenges facing patients with regard to care delivery. These included "fragmentation of care," a "lack of coordination among service providers," and patients navigating a "complex system" to obtain necessary resources in describing these care delivery challenges, one informant stated:

> Behavioral healthcare ... is somewhat fragmented, not consistently accessible ... and community-based behavioral healthcare access is limited ... I don't see a coordinated or consistently standardized entryway to access behavioral health services. Particularly on weekends or evenings or holidays, it's rather difficult.

Many informants highlighted particular challenges faced by patients at the ED from the time they present to the time the patient has been discharged and must connect with an outpatient provider. These barriers include ensuring patients are evaluated in a timely manner when they present at the ED, connecting patients to long-term care when they require care beyond the acute level, and coordinating post-discharge care between hospitals and outpatient providers, among others.

Care delivery issues are compounded by the fact that evidence-based care practices, while recognized by most informants as important, have not yet been widely implemented throughout the state. As one informant stated, "In terms of improvements, it would be wonderful if we could ensure quality standards across our system of care, ensure that people are using evidence-based practices. That's not happening at this point." Other informants stated, "I've heard different things about to what extent providers are really using evidence-based treatments or not," and "I don't know that I would necessarily say that the dissemination of evidence-based practices is necessarily a strength. I think that we have a lot of work to do in terms of identifying what they are and making them public and accessible to the individuals that are expected to implement them." Others were more hopeful regarding the overall adoption of evidence-based practices. These informants mentioned that evidence-based interventions are "growing," as is recognition that they are the "most efficient and effective ways" to care for patients.

Stigma was also a common refrain voiced by informants when discussing the delivery of behavioral healthcare. One informant described that "the biggest issue around substance abuse and mental health is the stigma related to it," and another stated "we need more education … more early intervention to continue to reduce bad discrimination stigma." Finally, when asked in what ways service delivery could improve for patients, another informant said:

> I would make stigma disappear. How horrible to have to be ashamed of an illness as though you're a modern-day leper just because you have a mental illness or an addiction problem, which is every bit as biologically based as … any other illness.… So many people were lost … and don't even get engaged in care because they feel ashamed.

Moreover, some informants stated that stigma exists among healthcare providers who have not received proper training in behavioral health. As one informant stated, the entity that "can really do a lot to erase that stigma in the medical field is the physical health field, because these are medical issues, and they're not social weakness

issues." However, others were more optimistic, stating that there is now an accepted belief that "addiction is a disease," that "recovery is a continuum" and that recovery should be recognized as "different for every person."

5 SHIFTING TOWARD A PERSON-CENTERED HEALTH CARE SYSTEM

Despite the outdated frameworks that currently characterize New Jersey's behavioral health system, there is movement toward a person-centered approach to care, defined as "fundamentally aimed at promoting the health and well-being of the totality of the person."[15] There is a recognized need to redesign the system so it is person-centered, addresses social challenges, integrates care across all providers, and is supported through coordinated governance and financing. However, there is a gulf between the siloed, disjointed system that currently exists and the person-centered system that is needed. Bridging this divide will require a significant shift in the principles that underlie how mental health services, addiction services, primary care, and housing are delivered. Fortunately, there are bright spots of innovation and evidence-based care delivery currently being implemented across the state and country. Table 6 highlights some of the shifts in principles beginning to be employed that need to be adopted on a wide scale to achieve system-wide change.

Table 6. Contrasting Approaches to Patient Care

	Problem-Centered Approach: Disjointed	Person-Centered Approach: Aligned
Mental Health	▪ Disability lens, medication focused ▪ Hierarchical ▪ Authoritarian ▪ Institutional ▪ Not comfortable with co-occurring substance use disorder	▪ Wellness and recovery focused ▪ Consumer and peer driven ▪ Trauma informed ▪ Community based ▪ Comfortable with co-occurring substance use disorder
Substance Use Disorder	▪ Moral failing ▪ Under-trained staff ▪ 12-step focused ▪ Inpatient detoxification and rehab focused	▪ Treatable chronic medical condition ▪ Addiction specialty, harm reduction ▪ Evidence based, trauma informed ▪ Outpatient detoxification and treatment
Primary Care	▪ 15-minute, volume-based visits ▪ Panel size too large ▪ Medicalizing social, behavioral problems ▪ Mental health, addiction carved out from scope	▪ Ambulatory ICU ▪ Panel management ▪ Integrated with mental health and substance use disorder treatment ▪ Health homes
Housing	▪ Shelter model ▪ Sobriety-based, rule-focused culture ▪ Separate from other services	▪ Housing First/supportive housing ▪ Harm reduction ▪ Integrated with mental health, addiction services, education, and job training

[15] Mezzich, J.E., Botbol, M., & Salloum, I.M. (2015). Mental health in person centered medicine. *International Journal of Person Centered Medicine, 5(1)*, 1-8.

The following sections enumerate the concepts described in Table 6. In particular, we point to evidence of shifts in the field toward an emphasis on wellness and recovery, supportive housing, behavioral health integration, behavioral health homes, and evolving workforce training models.

5.1 Wellness and Recovery

Many stakeholders agreed that New Jersey is at a pivotal moment in which key parties are working together to achieve a person-centered system. One reason stakeholders believed this shift is achievable is because of the movement toward "wellness and recovery" that has "taken ground in New Jersey." Among many informants, New Jersey was seen as "a leader in talking about wellness and recovery." There was a general perception that "telling people what they should do" simply does not work; instead, patients must be provided with the necessary tools to form their own paths toward recovery. The movement toward peer-provided services was perceived as playing a large role in this overall shift toward wellness. A 2009 National Alliance on Mental Illness (NAMI) study cited peer support as one of the major mental health "innovations" in the state. According to one consumer comment included in the NAMI report, "The system is trying to change to a wellness approach, and it is very open to consumers' opinions."[16] This sentiment was echoed among the informants, who noted the importance of peer support in recovery, affirming an appreciation for learning from "somebody who has been there" and is currently "in recovery." When informants described a shift towards wellness and recovery, they highlighted key components of this new model including: positive psychology, whole-person health and wellness management, a move from institution-based care, and peer run centers. Table 7 highlights informant comments related to these key components of wellness and recovery.

Table 7. Focusing on Wellness and Recovery

Concept	Informant Comment
Positive psychology	"It is an emphasis on that kind of positive psychology and health psychology." — Academic researcher
Whole-person health and wellness management	"I think people need to be assisted in taking responsibility for their self-management. That includes nutrition, stress reduction, disease management—all of the things that anyone needs to do to improve the quality of their life." — Community-based provider
Less institutional-based care model	"I think the effort is there to make this a less institutional model of care, [one of] wellness and recovery." — Hospital-based administrator
Peer run centers	"One thing…that New Jersey has done that I really salute is they have peer wellness and recovery centers in every county." — Advocacy organization worker

[16] Aron, L., Honberg, R., Duckworth, K., Kimball, A., Edgar, E., Carolla, B., …Fitzpatrick, M. (2009). Grading the states 2009: A report on America's health care system for adults with serious mental illness. Arlington, VA: National Alliance on Mental Illness.

5.2 Behavioral Health Integration

Informants recognized that integration of behavioral healthcare into non-behavioral health settings is a critical next step for achieving a system based on person-centered care. The opportunities include integrating mental health with substance use disorder services, primary care, and enhancing social service supports specifically housing.

Informants noted that this transition toward an integrated system, while in the nascent stages, is already taking place. According to one informant, "On a national level and certainly at a state level, [there is] a growing awareness and attention to the interplay and the correlation between behavioral health and physical health, and recognizing that the two can no longer be treated in isolation, and that the two are connected to one another." Another informant stated: "I think we have some very creative programs in the state. I think there's been a move to integrate behavioral health care with physical health care in some isolated settings. And I think some of those are very interesting initiatives."

In relation to supportive housing, informants noted, the state has recently placed "significantly more emphasis on housing." Sentiments included informants citing "growth in group homes," "supportive housing for various populations," and the movement toward providing individuals with intellectual disabilities housing options in the community. Additionally, informants mentioned Housing First policy in particular as an important component of the state's housing policy, and an opportunity for integrating supportive housing with behavioral healthcare in the community. Finally, informants mentioned the need for jurisdictions to work together to promote sensible housing options, with several informants citing the Southern New Jersey Continuum of Care, a regional governmental collaborative aimed at improving housing in the region, as a successful model. Informants provided examples behavioral health integration throughout the system from state leadership to service delivery. Examples of initiatives highlighted toward integration are included in Table 8.

Table 8. Behavioral Health Integration Initiatives

Initiative	Informant Comment
Medication management	"Given the shortage of psychiatrists, [we can now] move more medication management to primary care but have the psychiatrists as consultants. There's now a way to pay for that type of service." — Hospital-based provider
Integration of behavioral health on medical floors	"Within the hospital, we in behavioral health do a good job at reaching out to our colleagues by being consulted … on the medical floors for patients who have behavioral health needs." — Hospital-based psychiatric nurse
Telemedicine consultations with psychiatrists	"There's a really cool kind of telemedicine pilot that's going on in Bergen County that we're aware of where adolescent/child psychiatrists are putting aside some time and kind of making their services available through a telemedicine consult with primary care practices in a few communities." — Association director

Integration within state governance	"The marriage of mental health and addiction services at a state level and the leadership [are] creating an opportunity for a single voice." — Community-based counselor
Integration of behavioral health staff into primary care	"We have right now some psychology time within our primary care practice…. Their main focus is on people who are at high risk of readmission. And then we're also working through some plans to add some therapists…to our practices." — Community-based provider
Increasing State funding for supportive housing	"The state has put a good amount of money into some of the community programs, specifically supportive housing and enhanced supportive housing." — Academic researcher
Improving housing availability	"We certainly have had tremendous growth in our efforts to provide housing for individuals, whether it's through group homes or supportive housing for various populations." — Community-based provider
Piloting Housing First	"There has been an effort to improve and increase the opportunities for affordable housing," and the state's current focus is "on Housing First." — Community-based provider

5.3 Behavioral Health Homes

Informants also mentioned behavioral health homes as an important step toward the integration of behavioral and physical health care. At the time of the interviews, three behavioral health homes had been established or were in the process of being established in the state.[17] There was a clear sense of excitement and promise among organizations who were either implementing a behavioral health home or preparing to implement one. Many informants viewed health homes as integral to providing person-centered care, stating that "there is a lot of excitement" about them and describing them as fostering "bi-directional integration" between physical and behavioral health. Multiple informants mentioned that their organizations are taking the steps toward becoming a behavioral health home, and that they are working with outside partners to do so. For instance, one informant is working with the Department of Health in order to receive approval for the physical space, while another informant took part in a learning community to better understand the necessary planning process. Table 9 includes informant comments on the need to continue implementing behavioral health homes throughout the state.

[17] New Jersey Department of Mental Health and Addiction Services. *Health homes*. Retrieved from http://www.state.nj.us/humanservices/dmhas/initiatives/integration/hh.html

Table 9. Behavioral Health Home Concepts

Concept	Informant Comment
Targeting patients without access to primary care	"For those that may have deep needs in behavioral health and may not have access to primary care ... we have a SAMHSA grant ... that provides us with funds to provide a health home within one of our behavioral health locations." — Hospital-based psychiatrist
Growth of health homes	"There are a lot of different models of health homes that are showing up." — Behavioral health advocate "I certainly acknowledge the role of ... behavioral health homes, or primary care behavioral integration, as a notable achievement." — Community-based provider
Importance of health homes within the behavioral health system	"We're excited about [behavioral health homes], and we really see them as really good for integrated care." — Community-based provider

5.4 New Workforce Training Models

There is an overwhelming recognition among informants that "we need a well-trained workforce." As one informant noted, "In behavioral and physical health, we have professionals on both sides that need significant cross-training and a review of how they do business to really support an integrated care model." Among some informants, there was a recognition that models exist in other health care specialties that may be adopted by the behavioral health field. For instance, a program in which primary care physicians are trained in handling diabetics who do not require endocrinology specialists may be adopted into the psychiatric field. One informant who discussed this model stated that it is the "kind of a model that could be used [in mental health], because there aren't a whole lot of skilled, trained, board-certified psychiatrists out there."

Fortunately, the recognition that new training models are needed in behavioral health has already led to innovative practices implemented throughout the state including: incorporating psychiatry training into physician assistant education, enhancing training for psychologies, training of nursing home staff, and providing de-escalation training for non-behavioral health staff. Table 10 highlights these new models.

Table 10. Training Models

Model	Informant Comment
Physician assistant program	"We're working with the physician assistant program at Rutgers ... to bolster the focus on psychiatry and hopefully help recruit [physician assistants] who have an interest in psychiatry to get the training that they need." — Hospital system representative
Enhanced training for psychologists	"Psychologists have done training around depression treatment and motivational interviewing." — Hospital-based provider

Training for nursing home staff	"We work with [nursing home] staff and try to equip them in understanding how to better respond to emergencies and how to better utilize emergency services." — Manager of a state-funded program
De-escalation training for non-behavioral health staff	"We provide training for interacting with aggressive patients to non-behavioral health staff and security .. The training is intended to validate the concerns of the staff and patients." — Hospital-based nurse

6 SJBHIC HOSPITALS TAKING ACTION

6.1 HOSPITAL BEHAVIORAL HEALTH INNOVATIONS

Hospitals across the country are pursuing strategies to "increase access to mental health screening and outpatient services, to improve behavioral healthcare within the ED, and to connect patients with medical and social services in the community."[18] The five health systems participating in the SJBHIC are among these hospitals innovating their behavioral health service delivery to better serve patients. The innovations being implemented within the five hospitals generally fall into one of three categories: 1) Providing more targeted options for behavioral health patient care, embedding behavioral health staff in hospitals, expanding training to non-behavioral health staff, and improving care for behavioral health patients with repeat hospitalizations.

6.1.1 Providing More Targeted Options for Behavioral Health Patient Care

Hospitals are expanding their behavioral health service delivery options to more effectively target specific groups of patients, many of whom may not benefit from the current behavioral health delivery structure. A key example of this expansion is the new psychiatric observation unit at the Bridgeton location of Inspira Health Network. This space enables less critically ill patients to be cared for in a space that is adjacent to the inpatient psychiatric unit, where they receive all care that is traditionally provided to patients in the ED. The goal of the unit is to provide a more appropriate environment for patients who are voluntarily seeking treatment than the traditional ED environment. This intervention also improves ED throughput for these patients, and provides extra time for staff to diagnosis patients without admitting them to the inpatient psychiatric unit. Finally, psychiatric observation allows the crisis center to spend its resources on the population they are intended to target (i.e., patients who require evaluation for involuntary admission). The hospital receives Medicaid payments for each patient who is treated in this new unit. If the patient is admitted to the inpatient unit, the hospital is reimbursed from the beginning of the patient's stay in the observation unit. The outcomes for the unit thus far are positive. As of late 2015, about 25% of patients who would otherwise have been sent to the crisis center for evaluation are diverted to the psychiatric observation unit. Anecdotal information also shows that the unit has reduced stress on the ED.

6.1.2 Embedding Behavioral Health Staff in Hospitals and Expanding Training to Non-Behavioral Health Staff

Hospitals are moving in the direction of embedding behavioral health staff in hospital units outside the psychiatric unit. For instance, Kennedy Health now staffs all of its EDs with behavioral health staff, and there is behavioral

[18] Aston, G. Four ways hospitals are improving behavioral health care. (2015). *Hospitals and Health Networks*. Retrieved from http://www.hhnmag.com/articles/3476-four-ways-hospitals-are-improving-behavioral-health-care

health staff coverage on all of its medical floors. Within the ED, behavioral health staff work in collaboration with the ED team to triage, assess, and address the needs of patients who present with behavioral health issues. These staff target patients who can be safely discharged into the community or who meet criteria for voluntary admission to the inpatient psychiatric unit. The intended effect is to prevent patients from spending unnecessary time in the crisis center, improve patient flow throughout the ED and crisis center, and connect patients to outpatient resources in a more timely manner. Outcomes with this intervention have been equally positive. Anecdotally, staff report improved flow of behavioral health patients through the ED; improved satisfaction among patients, family and staff; and positive feedback from crisis center employees.

Lourdes Health System is also working toward behavioral health integration outside the behavioral health unit. Lourdes has hired behavioral health nurses to staff the ED. The goal of this nurse integration is to prevent crisis situations that require restraint by enabling the nurse to identify early warning signs of impending loss of control. This was a change to prior policy, which stipulated that the ED nurses were responsible for managing medications and crisis scenarios for psychiatric patients.

Finally, Cooper University Hospital's violence-aggression rapid response team builds on the process of embedding behavioral health staff throughout the hospital and outside the behavioral health unit. The goal of this team is to provide early intervention to patients in their current environment, to reduce the risk of further behavioral escalation that poses a risk of patients harming themselves, other patients, staff, or family. The team's involvement with patients also aims to establish a behavioral management plan, appropriate medication orders, and a behavior contract in collaboration with the clinical team. The team may be called to address triggers such as staff-perceived safety risk, angry facial expressions and cursing, destruction of hospital property, or failure to accept medical/nursing recommendations with a verbalized intent to harm others or self. While not embedded in a specific hospital unit, this team may be summoned by any staff member after hospital security is notified, to allow for the appropriate behavioral health response to the situation. All team members receive intensive classroom training on evidence-based approaches toward de-escalation. To ascertain the effectiveness of the intervention, the team conducts an informal evaluation during each post-event huddle. Team members also perform test drills on a monthly basis to better identify needs and track outcomes.

6.1.3 Improving Care for Behavioral Health Patients with Repeat Hospital Presentations

Hospitals are pursuing innovations aimed at providing better care for patients who repeatedly present at their facilities. For example, Virtua has succeeded in this area through its behavioral healthcare planning intervention, which involves creating care plans for behavioral health patients who have frequented the health system and have exhibited episodes of violence. A team of hospital staff including the chief psychiatrist, the behavioral health nursing director, the social worker, administrative directors from units other than the psychiatric unit, and the hospital risk manager develops the care plan. The care plan includes the reasons why the patient may pose a safety risk, directions to all staff on how best to interact with the patient, and medication recommendations, among other instructions. The patient is fully involved throughout the entire process. Staff explain to the patient the reasons why a care plan is necessary, review the care plan with the patient once it is created, and remind the patient of the care plan when the patient presents at any division. When patients for whom a care plan has been created present at a division within Virtua other than Memorial Hospital, where the behavioral health unit is housed, they are medically cleared and then transported to Memorial for treatment. Thus far, there has been positive anecdotal feedback from staff treating patients for whom care plans have been developed. For instance, staff have reported less aggression and fewer violent incidents from these patients.

6.2 Regional Behavioral Health Innovations

The hospital systems that constitute the SJBHIC are invested in ensuring a shift to person-centered care. During the first year of the project, they have begun to implement interventions, outlined in Table 11, aimed at providing an integrated, coordinated, and efficient behavioral health system.

Table 11. SJBHIC Interventions

Strategy	Intervention
Embedding behavioral health staff throughout the hospital and expanding training to non-behavioral health staff	*Integration of psychiatric specialists into EDs*: Integration of new clinical staff with psychiatric specializations into EDs to implement new care models and serve as champions for change.
	Shared protocols and education: Shared learning to develop and implement evidence-based practice protocols for care across the region.
Providing more options for behavioral health patient care	*Regional psychiatric emergency services:* Explore implementation of psychiatric emergency services centers based on a national model being employed regionally throughout the country.
Better care for patients with repeat hospital presentations	*Regional behavioral health complex case conferencing:* Joint case conferencing for patients who regularly visit multiple hospitals in the region; selected patients will receive a care plan shared by each participating hospital.
	Housing First pilot: Recovery-oriented approach whereby housing-unstable individuals are first provided with permanent housing and then offered additional services as needed.
Additional regional behavioral health innovations	*Shared measurement system*: Collection and review of regional core quality measures to assess collective progress, such as length of hospital stay.
	Legislation: Support for legislation aimed at innovative, evidence-based models for care delivery.

7 Conclusion

Despite the significant challenges facing New Jersey's behavioral health system, it appears that change is already under way toward achieving a more person-centered system. There is a continued recognition of the role that social determinants play in health outcomes, and of the need to construct a health care and social services system that addresses these factors. Stakeholders are also in agreement about the need to improve access to and

availability of services for those with a mental health or substance use disorder. In early 2016, Gov. Christie announced $100 million for increasing Medicaid reimbursement rates for mental health and substance use disorder treatment.[19] In his announcement, he discussed the burden currently placed on hospitals, particularly EDs. He also announced funding for specific substance use disorder initiatives.[20] The hospitals that constitute the SJBHIC are vocal supporters of the need to improve service delivery for behavioral health patients, both within and outside the hospital setting, and are supportive of this and other efforts aimed at improving access. As one hospital-based key informant stated, "We are not talking only about behavioral health patients, but patients" with a wide range of medical and social service needs. The system is not yet structured to adequately serve this population, but a diverse group of stakeholders recognizing the need for an improved system is a strong step toward achieving this goal.

[19] State of New Jersey. *Governor Christie builds on record of reform in 6th State of the State address*. (2016). Retrieved from http://www.nj.gov/governor/news/news/552016/pdf/20160112g.pdf

[20] Governor makes historic financial commitment of $100M for MH/SUD services. (2016). *NJAMHAA Newswire*.