Evaluation of the Minnesota Preferred Integrated Network

FINAL REPORT
June 2015

EXECUTIVE SUMMARY

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DesertVista™ CONSULTING

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I. Introduction

Research has shown that persons with serious mental illness (SMI) die an average of 25 years earlier than individuals within the general population, mainly from preventable and treatable conditions such as heart disease, diabetes, and hypertension (Leff, McPartland, Banks, Dembling, et al., 2004; Parks, Svendsen, Singer, & Foti, 2006). Compared with the general population, individuals with mental illness have significantly higher rates of co-occurrence of high blood pressure, tobacco use, obesity, heart disease, diabetes, asthma, and other chronic conditions. A number of risk factors contribute to the higher rates of morbidity and mortality for persons with SMI. These factors include co-occurring substance use conditions, problems with access to primary medical and specialty care, non-adherence to recommended treatment, contextual factors like poverty and housing instability, transportation barriers, financial barriers, cultural barriers, and stigma. Additionally**,** the care that this population receives is often not of the appropriate level. That is, persons with SMI often receive intensive and high-cost inpatient and emergency department care for conditions that could be treated at least as effectively, or avoided entirely, through routine outpatient treatment and prevention (Berwick, Nolan, & Whittington, 2008).

The Preferred Integrated Network (PIN) Program

To address the issue of premature morbidity and mortality for persons with SMI, the Minnesota Statutes 245.4682 authorized the Department of Human Services to establish a project to demonstrate the integration of physical and mental health services within a managed care organization (MCO) and its coordination with county social services. In 2009, in a successful response to a Request for Proposals from DHS, a partnership consisting of Medica Health Plan, Medica Behavioral Health, and Dakota County was formed to better meet the health, mental health, and social service needs of Medicaid-eligible adults with SMI and children with serious emotional disturbance (SED) in Dakota County through a program of integrated care and services known as the Preferred Integrated Network (PIN).

PIN Program Goals

The PIN program was designed to address these issues through a system with the following overarching goals:

1. *Integrate behavioral health care, physical health care, and coordination with social services* for the eligible population
2. *Support and improve the health and well-being* of children with serious emotional disturbance and adults with serious mental illness
3. Improve *access* to behavioral and physical health care and social services
4. Improve the *quality and capacity of the workforce and service systems*
5. Improve *clinical outcomes* for enrollees
6. Improve *accountability* through county/MCO partnerships to meet the needs of members

The HSRI/Desert Vista Consulting Evaluation

This report presents the results of an independent evaluation conducted by the Human Services Research Institute and Desert Vista Consulting. Conducted in two phases (Phase 1: January 2013 to December 2013; Phase 2: January 2014 to June 2015), the evaluation incorporated both qualitative and quantitative methods to examine the extent to which program goals were achieved. The qualitative component consisted of interviews with key informants as well as a leadership survey, consumer focus groups, a review of documents, structured chart reviews, and logs of health referrals. The quantitative component consisted primarily of analyses of Medicaid claims and Level of Care Utilization System (LOCUS) data, including statistical models comparing cost-related utilization for enrollees in the PIN program, enrollees in a Medicaid managed care product (Special Needs BasicCare), and individuals enrolled in fee-for-service Medicaid.

A Phase 1 Report, issued in February 2014 and incorporated in this Final Report, addressed three key areas: 1) program operations and effectiveness, with a particular focus on the Navigator role and the public-private partnership; 2) access to services; and 3) cost-related service utilization. This Final Report elaborates on those areas and provides expanded analyses of service utilization and costs (in the form of expenditures) for PIN enrollees compared to Medicaid recipients receiving Targeted Case Management (TCM) under fee-for-service (FFS) and Special Needs BasicCare (SNBC) arrangements. In addition, this report assesses the PIN program model, including strengths and areas for improvement, and the experience of participants served.

II. Description of the Preferred Integrated Network program

The PIN intervention model is a public-private partnership between a provider network administered by Medica, a nonprofit managed care organization that performs oversight and management functions and provides direct services, and Dakota County. At the core of the model is the concept of Wellness Navigation, a service provided by four contracted community mental health agencies, Medica Behavioral Health, and Dakota County.

Eligibility Criteria: PIN program participation is voluntary. Eligible individuals are Dakota county adults with SMI and Dakota county children with SED who are enrolled in Medicaid, with or without Medicare; have a significant history of mental health concerns; and most of whom have a history of high-cost utilization while in fee-for-service (FFS) plans.

Integrated Benefit Set: PIN enrollees have access to an expanded health benefit set under Medica as well as a robust provider network (hospitals, clinics, specialty providers). The PIN benefit set comprises a continuum of mental health services that includes Targeted Mental Health Case Management and comprehensive health and medical benefits (dental and vision care, services provided in the home or mental health setting, physician assistant and public health nurse treatment review and consultation, wellness workshops, gym membership, and transportation to medical appointments and pharmacies).

Table 1. Program Demographics, All Participants

	Program			
	SNBC N=241	FFS N=995	PIN (direct) N=156	PIN (telephonic) N=105
% White	85	87	82	80
% Male	49	46	37	42
Average Age	40	39	42	40
# Chronic Conditions per Member	1	1	1	1

Table 2. Program Demographics, Medicaid-Only

	Program			
	SNBC N=241	FFS N=995	PIN (direct) N=125	PIN (telephonic) N=69
% White	80	83	76	77
% Male	49	44	45	39
Average Age	39	34	37	36
# Chronic Conditions per Member	1.0	1.0	1.0	1.0

Wellness Navigators

Case managers at four agencies in Dakota County and Medica Behavioral Health (telephonic only) provided Wellness Navigation for PIN program participants. The Wellness Navigator is a key component of the PIN program. Navigators are assigned to each enrollee to serve as a single point of access and coordination for all medical, behavioral, and social services. Navigator functions include:

- An annual Health Risk Assessment that addresses multiple aspects of physical health and wellness, including: mental health, substance use, social service needs, and functional status.
- Comprehensive Care Planning that builds on the information gathered through the Health Risk Assessment, incorporating the physical health and wellness goals of participants in a person-centered care plan.

The table below presents summary information on Navigator caseloads at the four agencies[1]: number of participants served, number of contacts total and per person, and the amount of time total and per person for the most recent year (2013). Frequency of contact (average monthly hours) varies slightly across the agencies by year, but the average is 2 to 3 hours per month for three of the four agencies. Some of the variation across the agencies (particularly Agency 4) is likely related to the lack of standardized interagency reporting requirements or a common information system.

Table 3. Cases, contacts, and hours for four Navigator agencies

	2013			
	Agency 1	Agency 2	Agency 3[1]	Agency 4
Total Cases	60	74	90	96
Case Months	321	407	540	545
Contacts Total	1,622	1,646	1,410	*
Contacts per Case per Month	5.1	4.0	2.6	*
Hours Total	698	1,344	634	1,226
Hours per Case per Month	2.2	3.3	1.2	2.23

[1] Data reported for sample of 1 in 10 cases, extrapolated to full caseload

* Data reported was in different format than other three agencies and therefore not included in the table.

[1] Data on the Medica Behavioral Health Navigator caseloads were not available.

III. PIN Program Implementation Achievements and Challenges

Based on information collected through document reviews, a survey and interviews with PIN leadership (DHS, Medica, Dakota County Social Services, and participating agencies), navigator interviews, health service referral logs, consumer focus groups, and targeted chart reviews, the following section presents findings related to program achievements and areas for improvement.

Program Achievements

Integration

- Communication and collaboration among PIN stakeholders. The history and strength of the partnership between Medica Health Plan and Dakota County, with Dakota County in the role of coordinator with the four community-based agencies, established a solid foundation for program design and implementation.
- Formalizing the inclusion of important health information into all mental health participant charts through the expanded (and required) Annual Health Risk Assessment.
- Coordination between community-based agencies and Medica (through dedicated PIN program liaisons) to facilitate needed medical referrals and clarify any questions related to service access or benefits.

Improved Access

- Enhanced connection and access to preventative and primary care services and health education through Clinics Without Walls (CWOW), free gym membership, treatment plan review and group classes at drop-in centers focused on wellness and health improvement topics.

Accountability

- Leadership from and partnership with Dakota County facilitates access to the range of social services and supports available to PIN participants.
- Inclusion of consumers in PIN program updates through Local Advisory Committee.
- Systematic collection of participant-level data, as required.

Capacity and Quality

- Commitment to participant-centered care and continuity of care for the PIN population.
- Elevated awareness of the health needs of individuals with mental illness.
- Improved coverage and health care access through Medica's expanded benefit set, robust provider network, and ongoing commitment to meeting the needs of the target population.

Participant Experience

In focus groups conducted during the summer of 2014, PIN participants identified several program features they consider important, including:

- No co-pay
- Access to CWOW physician assistant and educational groups
- Transportation
- Gym membership
- Coverage compared to and combined with Medicare (e.g., better optical, full coverage bariatric surgery, etc.)
- Formulary coverage
- Medica Network in Dakota County
- Medica Accessibility Solution Guide (on Medica website)

PIN participants shared what they considered to be important supports provided by their navigators, including:

- Helps with "navigating life"
- Phone calls and coordination across the range of providers and case managers serving the participant
- Coordination with Adult Rehabilitative Mental Health Services (AHRMs) workers, provider changes (e.g., psychiatrists)
- Understanding and addressing the relationship among health, mental health, and substance use disorder issues and treatment
- Post-hospital transitions to the community
- Access to specific treatment programs (e.g., DBT and THRIVE)
- Goal setting and accountability for achieving goals
- Nutrition counseling

Supporting Participant Health and Wellness

As part of the evaluation, Navigators from all four community-based agencies tracked their efforts to refer and link PIN participants to health and wellness–related services for one full quarter (April-June 2014). A "referral" was defined as an interaction between Navigator and participant during which a suggestion was made for a participant to follow up with a program, resource, or named provider. Navigators also documented when they have a substantive communication with a third party specifically about a health issue related to a participant, but the participant was not on the phone or at the in-person meeting. (An example is coordination with a PIN participant's PCP related to a health condition or hospitalization).

The table below summarizes the range of health-related referrals made by the Navigators over the 3-month period. The most frequent referrals and interactions were care coordination conversations with other providers (for example, PCPs, therapists, ARMHS, CADI or ILS workers, etc.); referrals to the gym, primary care, health education groups and coordination with Medica Health plan. While there is evidence of Navigators assisting PIN participants with referrals for health-related services and supports, there is significant variation in the frequency and type of referrals across agencies.

Table 4. Health Referral Summary by Agency (N=320)

Referral Type	Agency 1 (20%)	Agency 2 (29%)	Agency 3 (24%)	Agency 4 (27%)	Total
CWOW	0	11	1	0	**12**
Gym	13	24	2	2	**41**
Health Education/Coaching (e.g., Diabetes groups)	10	9	8	1	**28**
PCP/provider referral	11	9	20	1	**41**
Nutritionist/Dietician	9	2	3	2	**16**
Chemical Health (detox, groups)	7	3	4	1	**15**
Medica Health Plan (member services, nurse line, etc.)	4	5	17	1	**27**
Dental services	3	15	1	0	**19**
Home health aide	2	2	0	1	**5**
Skilled Nursing care	6	4	4	4	**18**
PT/OT	1	1	1	0	**3**
Pain Management	19	5	0	2	**26**
Smoking Cessation	4	3	1	0	**8**
Care Coordination with third party (e.g., ARMHS, CADI, PCP, Specialist)	20	15	22	1	**58**
Other*	17	8	24	5	**54**
Total	**126**	**116**	**108**	**21**	**371**

* Most referrals documented as "other" included referrals to specialists (e.g., dermatology, oncology, psychiatry, chiropractic), communication with social service providers, and coordination around transportation and program eligibility.

Areas for Improvement

Most of the areas for improvement identified through the evaluation reflect common challenges associated with implementing new service delivery models that target participants with complex health and behavioral health conditions in community-based settings with limited infrastructure to track clinical and program outcomes and a lack of clinical and operational protocols to create a standardized intervention across diverse settings.

Quality and Accountability

- **Lack of standardized policies/protocols for PIN navigation component created variation in PIN program implementation across agencies.**
    - Telephonic, health plan–based navigation model differed from community-based MH agency navigation model (caseload size, frequency of participant contact)
    - Contracted agencies that have onsite drop-in center capacity (two of the four community-based agencies) provide participants with access to additional health education resources
    - Level of communication and coordination with medical providers
    - Frequency and scope of health care referrals and follow up
    - Frequency and scope of social service referrals and coordination
    - Quality-of-care planning goals
    - Incorporation of principles of recovery
- **A need to shift toward a population health management focus across the PIN partners.** High-quality patient-level information is collected but cannot be used to its full potential. The Health Risk Assessment, LOCUS, and Goal Plan Review all contain multiple measures—including standardized assessment tools—to assess participant improvement in health, behavioral health, and functional status. While these provide Navigators with important clinical information, this information is not accessible nor, as of yet, well-suited for system-wide purposes such as the monitoring of outcomes and quality due to the lack of interagency clinical information system infrastructure.
- **Limitations in the quality, scope, and integration of information systems essential for purposes of accountability, efficiency, and quality improvement.** The existing electronic data systems (and remaining paper charts) at the Navigator

agency level are not sufficient for tracking care coordination and clinical outcome data. Navigators are required (by the state, county, and managed care plan) to complete numerous forms at specified intervals and document service encounters for billing and compliance purposes, but there is no designated entity responsible for analyzing this information on a routine basis to inform clinical decision-making or determine the effectiveness of services and treatment interventions.

Integration of Health, Behavioral Health, and Social Services

- **Limited integration or care coordination at the clinical level (behavioral health provider to primary care or other health care provider).** The PIN program created a "network" that provides coverage for health and behavioral health services. However, the program model does not include integration of health and behavioral health providers working together to routinely coordinate care. The PIN program model would benefit greatly by intentional partnership with primary care providers that work with PIN participants to engage in shared treatment planning. Primary care providers/clinics need clearly defined roles and responsibilities for managing the chronic conditions of PIN participants.

- **Limited data sharing between Navigators and health care providers, including emergency departments and hospitals**. Navigators send letters with participant updates to PCPs every 90 days, but contact and coordination appears minimal; what does occur is not systematically documented or easily tracked. In addition, Navigators are not routinely informed of participant ER/hospital utilization, which impedes integration and care coordination efforts.

Participant Experience

In focus groups, PIN participants identified several areas where implementation varied within and across agencies, which likely affect the quality of the program and influence participant satisfaction:

- Stability and consistency of case managers due to staff turnover
- Perception of Navigator's knowledge of the program and resources available
- Ensuring that participants have a clear understanding of the benefits and services associated with the PIN
- Goal setting with Navigators does not always include health or wellness goals

IV. Outcomes Assessment: The Level of Care Utilization System (LOCUS)

In implementing the PIN program, there was no requirement for participating agencies to collect PIN-specific data on patient and population outcomes. The lack of standard, PIN-specific data is a limitation that prevents exploration of some aspects of program effectiveness that would be of interest, such as possible differences between telephonic and face-to-face case management models. In the absence of this kind of information, a substitute was used in the form of the LOCUS assessment, a level of care tool used by DHS to determine the resource intensity needs of individuals who receive certain mental health services such as adult day treatment and assertive community treatment. The LOCUS is completed at specified intervals by the individual's mental health provider; therefore, it can be analyzed to track functioning over time.

The following table presents LOCUS scores for a subset of PIN enrollees who had an assessment within 4 months of enrollment and another at least 1 year later. There is a mix of slight changes in both directions (lower is better on the scale of 1 to 5) for both forms of case management. Though not tested for statistical significance, these changes are worthy of further monitoring, such as the improvement in treatment and recovery but an increase in risk of harm.

Table 5. Change in LOCUS scores for Face-to-Face vs. Telephonic Case Management

	Face-to-Face (n=342)		Telephonic (n=39)	
Domains	Time 1 Mean	Time 2 Mean	Time 1 Mean	Time 2 Mean
LOCUS Score Total	18.46	18.63	17.64	17.77
Risk of Harm	2.64	2.96	2.51	2.54
Functional Status	2.73	2.73	2.64	2.62
Co-Morbidity	2.68	2.76	2.49	2.54
Level of Stress	2.63	2.68	2.38	2.38
Level of Support	2.27	2.25	2.36	2.38
Treatment/Recovery History	2.84	2.75	2.67	2.62
Engagement	2.66	2.77	2.59	2.69

V. Service Utilization

Penetration (the percentage of enrollees using a service) and utilization (the amounts or units of service used on average) were assessed in two ways, each of which serves a difference purpose for evaluation. The first approach was simply to compare PIN, FFS and another managed care product (Special Needs BasicCare) enrollee utilization patterns over time. This provides a straightforward picture of the volume of treatment provided through the three programs. The second approach was to use a multivariate model to control for differences between the three groups—apart from program membership—that might affect utilization. The purpose of this approach is to estimate the effect of the program model independent of any differences between the respective enrollee groups that might affect utilization.

Evaluation Comparison Groups

The comparison group constructed consisted of adults from Dakota and from five comparison (non-PIN) counties (Anoka, Carver, Scott, Washington, and Wright) who at baseline were enrolled in fee-for-service Medicaid and receiving Targeted Case Management. A number of individuals in the comparison group who were in FFS Medicaid at the beginning of the study period were subsequently enrolled, midway in the study period, into another Medicaid managed care program: Special Needs BasicCare (SNBC). Because it was hypothesized that utilization and cost under SNBC may differ from that for FFS, we separately identified this group in the analysis, resulting in a three-way comparison between FFS, SNBC, and PIN.

The multivariate model tested for statistically significant differences in utilization that could be attributed to program type, apart from possible differences in the characteristics of the three enrollee groups that might also affect utilization. These characteristics (control variables) were age, gender, amount of prior utilization, and medical complexity (number of chronic conditions).

Evaluation Limitation

An important limitation for analyzing the full impact of the PIN program is that, despite the efforts of DHS, we were unable to obtain agreement from CMS to use the Medicare data in a timely manner, thus omitting partial utilization and payment data for the approximately 50% of PIN enrollees who are dually eligible.

Findings: Penetration, Utilization, and Expenditures

The following tables show trends in penetration and utilization of specified categories of services: general practitioner, all MDs (general practitioners and specialists), emergency department, inpatient, hospital clinic, and mental health/substance abuse clinic. These tables are for the Medicaid-only population as the unavailability of Medicare data prevented an accurate count of the dual-eligible population.

For routine outpatient care (GP, MD, Hospital Clinic, and MHSA clinic), PIN penetration rates and utilization rates both were generally higher than FFS, with SNBC in between. FFS was higher for Inpatient and ER. This result is consistent with expectations for the PIN program, which aims to address problems of excess morbidity and mortality by improving access to routine preventive health care and, consequently, decrease the need for more intensive crisis-related services.

Table 6. Medicaid-Only Penetration – Percentage using service type, by year

Service Type	2010		2011		2012[1]			2013		
	PIN N= 124	FFS N= 1211	PIN N= 125	FFS N= 1080	PIN N= 157	FFS N= 840	SNBC N= 228	PIN N= 158	FFS N= 575	SNBC N= 241
GP	95	72	89	69	87	68	79	89	73	89
All MD	98	84	98	84	97	84	95	94	82	95
ER	44	40	35	43	36	40	38	36	39	47
Inpatient	18	28	10	25	17	23	18	16	26	19
MHSA Clinic	27	41	35	36	38	31	24	34	32	38

[1] SNBC implemented in January 2012.

Table 7. Utilization – Number of visits per member per month, by year

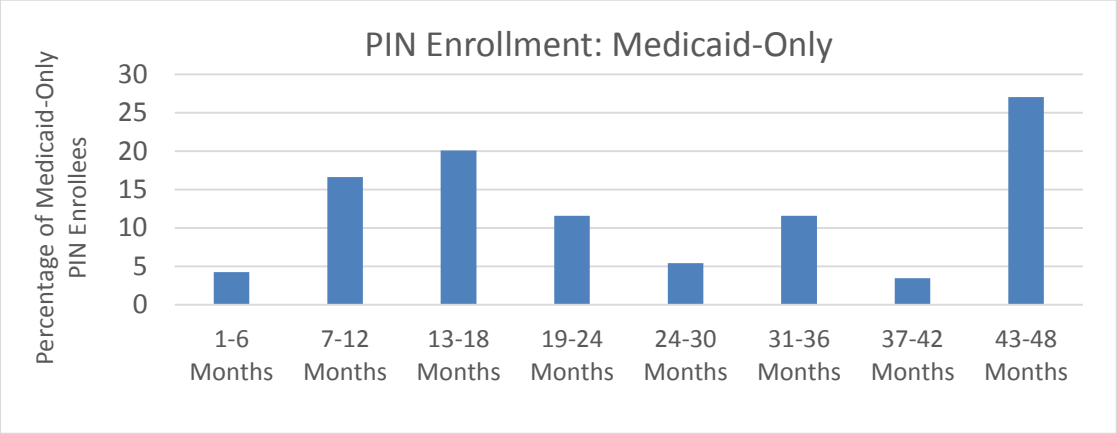
Service Type	2010		2011		2012[1]			2013		
	PIN	FFS	PIN	FFS	PIN	FFS	SNBC	PIN	FFS	SNBC
GP	0.86	0.65	0.92	0.68	0.99	0.67	1.00	1.06	0.82	1.16
All MD	2.42	2.01	2.29	2.06	2.75	1.96	2.65	2.56	1.97	2.48
ER	0.15	0.16	0.12	0.17	0.13	0.18	0.24	0.09	0.16	0.17
Inpatient	0.03	0.08	0.02	0.07	0.03	0.08	0.06	0.04	0.07	0.04
MHSA Clinic	0.72	0.85	0.94	0.85	0.86	0.84	0.87	0.77	0.88	0.93

[1] SNBC implemented in January 2012.

Findings: Effects of Program Exposure on Service Utilization

The multivariate analysis consists of a negative binomial regression model using a "dose effect" approach, with dosage representing the amount of time an individual was in each of the three conditions (PIN, FFS, and SNBC).[2] In contrast to the descriptive data consisting of counts of service use, the multivariate findings indicate that program type— controlling for differences in group characteristics (age, gender, and number of chronic conditions) that might also influence utilization—tended to reduce both utilization of inpatient and outpatient services. As discussed above, the effect of reducing utilization of inpatient and emergency department services is consistent with the goals of the PIN program, whereas a decrease in the use of outpatient care is not one of the goals of the PIN. It is notable that the effect in reducing inpatient and emergency department use is greater than the effect in reducing outpatient care. It is not surprising, moreover, that the effect of the program would be limited given that the progressive enrollment process means that a significant number of individuals were enrolled for only a limited time—that is, they received a "reduced dose" as shown in Figure 1, indicating that nearly 40% were enrolled for 18 months or less and only a little over 25% were enrolled for the entire 4-year measurement period.

Figure 1. Months of enrollment in the PIN: Medicaid-Only Enrollees



[2] Negative binomial regression is a technique often employed in health services research as it accommodates non-normal and zero-inflated distributions, which are characteristic of health care utilization.

Case Management Type: Direct vs. Telephonic Penetration and Utilization

Tables 8 through 11 show comparisons between agencies that conducted case management telephonically versus those that used direct (in person) case management for dual-eligible and Medicaid-only PIN enrollees. The clearest differences are in the greater use of mental health/substance abuse services by direct case management for both dual-eligible and Medicaid-only enrollments. Telephonic case management had higher utilization of hospital outpatient clinics for Medicaid-only enrollees, though there was little difference for the dual-eligible group. It is interesting to note, too, that utilization of ER and inpatient services was lower for PIN participants receiving telephonic navigation. This finding may be related to differences in the functional levels served by the two navigation models, with the telephonic group being higher functioning as indicated by LOCUS scores (Table 5).

Table 8. Dual-eligible, percentage using service (penetration rates), by case management type

Service Type	2010		2011		2012		2013	
	Direct	Tele	Direct	Tele	Direct	Tele	Direct	Tele
GP	95	92	85	88	66	69	71	69
All MD	99	99	95	94	87	88	93	90
ER	40	42	37	46	44	39	40	44
Inpatient	17	13	13	11	20	18	13	7
MHSA Clinic	42	32	45	29	43	30	39	33

Table 9. Medicaid-only, percentage using service (penetration rates), by case management type

Service Type	2010		2011		2012		2013	
	Direct	Tele	Direct	Tele	Direct	Tele	Direct	Tele
GP	94	98	88	90	90	83	91	86
All MD	98	100	100	95	98	95	95	93
ER	45	43	39	28	42	25	38	33
Inpatient	17	20	12	5	22	7	19	12
MHSA Clinic	32	18	40	25	43	31	35	33

Table 10. Dual-eligible, mean number of visits per member per month

Service Type	2010		2011		2012		2013	
	Direct	Tele	Direct	Tele	Direct	Tele	Direct	Tele
GP	0.92	0.82	0.61	0.54	0.16	0.19	0.19	0.15
All MD	2.75	2.50	2.19	1.89	0.96	0.84	0.88	0.65
ER	0.10	0.08	0.11	0.09	0.13	0.17	0.15	0.11
Inpatient	0.02	0.01	0.01	0.01	0.02	0.02	0.02	0.01
MHSA Clinic	1.35	0.61	1.28	0.45	1.46	0.61	1.34	0.60

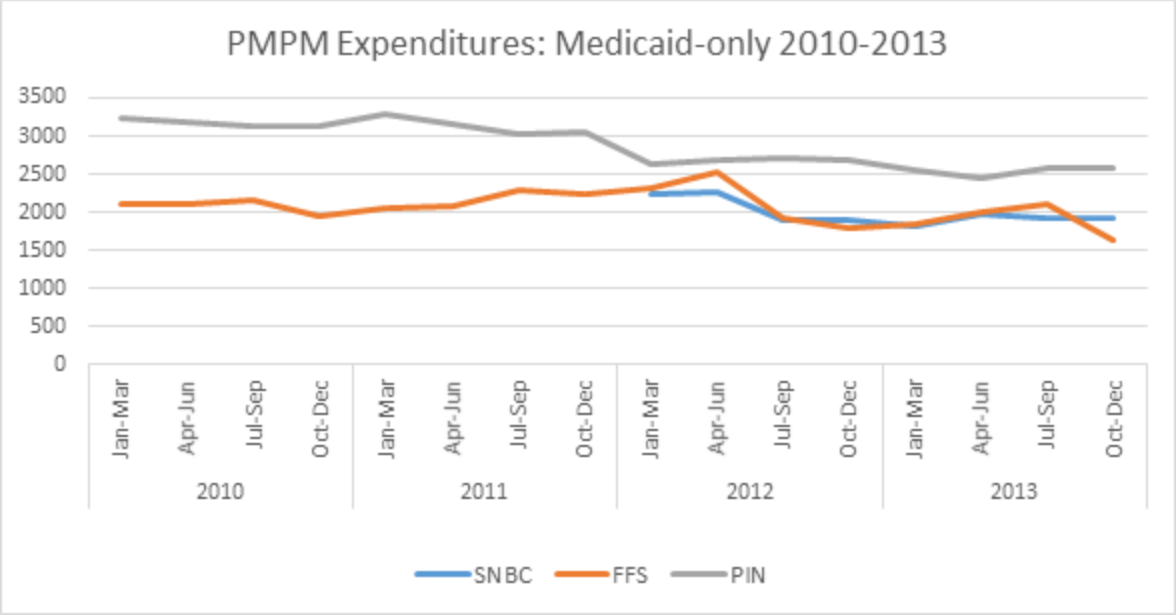
Table 11. Medicaid-only, mean number of visits per member per month

Service Type	2010		2011		2012		2013	
	Direct	Tele	Direct	Tele	Direct	Tele	Direct	Tele
GP	0.92	0.76	0.99	0.80	1.11	0.77	1.20	0.84
All MD	2.58	2.09	2.54	1.79	3.18	1.99	3.01	1.84
ER	0.13	0.19	0.12	0.12	0.14	0.10	0.09	0.08
Inpatient	0.03	0.02	0.03	0.00	0.04	0.01	0.04	0.02
MHSA Clinic	0.89	0.38	1.23	0.36	1.03	0.57	0.85	0.66

VI. Service Expenditures

Expenditure patterns, taken together with patterns of utilization by category of service, are as expected and consistent with the goals of the PIN program. Per member per month (PMPM) expenditures were calculated for the combined Medicaid-only and dual-eligible population and for the Medicaid-only population and shown below in Figure 2 are the expenditures for the Medicaid only group. The trends identified in the data analysis indicate that the PIN program generally achieved its intended goals by improving access to routine outpatient care and reducing utilization of high-cost, intensive treatment. **The higher expenditures relative to the fee-for-service group is attributable to improved access to routine outpatient care and is offset by a reduction in high-cost use of emergency and inpatient services.**

Figure 2: PMPM Expenditures by year, Medicaid-only (excluding dual-eligible)



VII. Summary and Recommendations

The Preferred Integrated Network (PIN) is a public-private partnership with the goal of integrating health, behavioral health, wellness, and social services for persons with serious mental illness. The PIN is a *systems integration model* based on partnership and contractual agreements among DHS, Medica, Dakota County, and the contracted agencies providing Wellness Navigation services. When developed in 2009, the PIN was an ambitious and

innovative approach to creating a custom service network for vulnerable populations. It preceded and anticipated many developments in health care reform—notably, the provision for health care homes in the Affordable Care Act. As a result, it provides a number of important lessons for future system improvement and reform in Minnesota and throughout the nation.

The system-level infrastructure established through the PIN will support the evolution toward models that require more robust clinical integration, such as the person-centered health home (PCHH), the Minnesota Behavioral Health Home (MN BHH), and the Certified Community Behavioral Health Clinics (CCBHC).

At the core of these emerging system reform models are four principles of effective care that support service delivery redesign:

1) **Person-Centered Care:** Basing care on the individual's preferences, needs, and values. The individual is a collaborative participant in health care decisions and an active, informed participant in treatment.

2) **Population-Based Care:** Strategies for optimizing the health of an entire participant population by systematically assessing, tracking, and managing the group's health conditions and treatment response. It also entails approaches to engaging the entire target group, rather than just responding to the participants that actively seek care.

3) **Data-Driven Care:** Strategies for collecting, organizing, sharing, and applying objective, valid clinical data to guide treatment. Validated clinical assessment tools monitor response to treatment, and information systems such as registries track the data over time.

4) **Evidence-Based Care:** The best available evidence guides treatment decisions and delivery of care. Both the behavioral health agency and its health provider partner (if applicable) must deliver evidence-based services.

MN BHH. In Minnesota, the health home model developed and articulated to CMS places behavioral health providers as the center of the care system responsible for care coordination and population management. This role also includes enhanced service integration, monitoring primary medical care utilization, connection to social services and community supports, accountability for improved clinical and financial outcomes, and use of health information technology and registries.

CCBHC legislation also requires behavioral health centers to engage in partnerships with a variety of health system partners—from primary care to hospitals, VA centers, and others—reflecting the need for health care organizations to work together to demonstrate concrete health outcomes and high-value care.

Recommendations

To strengthen and contemporize the PIN program to align with other Minnesota system redesign efforts, we recommend the following:

Program Model Improvements

- Align future PIN program activities with emerging national models that build on integrated team-based approaches to care, health homes, CCBHCs, certification standards required under the MN BHH, essential components of care coordination, and outcomes-based care.
- Leverage the system integration partnerships and contractual agreements that exist between the state, Medicaid managed care plan and county to support greater clinical integration within behavioral health and medical provider networks.
- Expand PIN partners to include medical providers (PCPs, clinics, hospitals) to create a cross-sector team care approach, improve care coordination and expand access to health services.
- Prioritize and formalize essential care coordination functions and determine roles and responsibilities across state, health plan, county, and community agency partners.
- Standardize Wellness Navigation protocols, including referral pathways, cross-sector provider communication, and follow-up practices, to ensure greater consistency of model implementation across sites.

Data Infrastructure and Movement Toward Outcome-Based Care

A major challenge in health care reform, especially in the integration of care across multiple provider organizations, is the development of comprehensive data systems that are capable of monitoring patient outcomes, quality and costs, and driving increased efficiency and quality improvement. The State, health plans, and counties play an important

role in facilitating a shift from data reporting for "compliance" to "accountability" for population health management and outcome-based care.

- Train behavioral health providers to routinely collect and use data to inform clinical decision-making and demonstrate improved participant-level outcomes.
- Improve capacity across all PIN partner agencies to collect data in formats that allow for assessment of the core functions that are essential to integrated or coordinated care (e.g., referral tracking, follow up, care planning, and cross provider/system communication).
- Ensure that the goal of required data collection and reporting moves beyond documenting the number and type of services delivered to tracking whether the services delivered are making a difference in the lives of participants and improving overall population health (i.e., moving from volume to value-based care).
- Work with CMS to eliminate barriers that restrict access to Medicare cost and utilization data to ensure robust monitoring of the effectiveness of services delivered to the dual-eligible population.